THE

MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, Rural Economy & Mechanic Arts.

Vol. 4. BALTIMORE, JULY 1, 1867. No. 7.

A SUMMER REGIMEN.

Whilst we do not believe with the vegetarians that all meats should be avoided, we entirely concur with them in the opinion that a free use of fruits and vegetables is essential to health, and that our summer diet should be regulated by requirements of the season. In all country districts salt meats are largely used during hot weather, often because of the difficulty of obtaining fresh meats, but more frequently from not having the facilities for preserving it from tainting if kept for more than a day or two. There are indeed large districts of country where salt meats are in constant use, and there can be no doubt that many of the disorders of which people complain are attributable to this cause. For many years sailors on long voyages were almost inevitably subject to that terrible disease called scurvy, from the fact that they were limited almost exclusively to a diet of salt meats. But since vegetables and fruits prepared for the purpose, either hermetically sealed or otherwise, have been introduced on shipboard the scurvy which so often baffled the skill of the best physicians has almost entirely disappeared. In remote country districts cases of scurvy are even now of not unfrequent occurrence, and are attributable to the same cause—the lack of vegetables and fruits in sufficient quantities to cleanse and purify the blood. Even where scurvy is unknown other diseases afflict the system that may often be traced to the excessive use of salt meats and to a lack of those cleansing acids which fruits and vegetables can best supply.

This subject is of so much importance, that taking into consideration the enormous differences in temperature between our winter and our summer seasons, the necessity of adapting our food to these changes ought to be self-evident to every one. In the winter the free use of meats is admissible to maintain a due supply of caloric. In the summer an equally free use of vegetables and fruits is a necessity to cool and purify the blood. A thoughtful article in the *Cincinnati Enquirer* of a recent date put this matter in its true light. The writer says:

"The season of fruit is now with us, and let us be thankful that the precious boon promises to be most abundant. The strawberry crop, in particular, is very large this season, having nearly escaped from the effects of frosts in the latter part of May, and, owing to the prolonged moist and cool weather, will hold out longer than is usual in our climate of hot sun. Our spring this year, has been much like the springs in Great Britain and the Northern parts of Europe. Strawberries are very fine and large, and, from our present warm weather, well ripened. Let all who can obtain them, partake of them freely, not as a temporary gratification merely, but as promotive of digestion and sound health; and if all can not indulge in the delicacies which come earliest, let the little ones have the first share. Their young palates relish these luscious things most keenly, and their growing, tender frames are most in need of the materials which acid fruits supply. But be careful not to eat any fruit or vegetables which have undergone, in the least degree, any fermentation, which, in warm weather, in a few hours, they are very apt to do.

Our fruit-growers are among our true public benefactors. Every man who plants an orchard, or cultivates the strawberry and blackberry, especially among the small fruits, is contributing to the public wealth and welfare. We want more fruit, much more even than is now produced. It is a misfortune to the community that in some parts of the country, and among our farmers, strawberries are not cultivated in greater profusion—the berry which comes first to regale the palled appetite in spring—the fruit of which the devout old English divine said, that "doubtless God could have made a better berry than the strawberry, but doubtless God never did."—Where one acre is now planted in strawberries there ought to be five. They ought to be brought within the reach, not only of the humblest mechanics, but of everyday laborer. And then the period is approaching when they ought to avail themselves of one of the greatest improvements in modern times in the culinary art—the preservation of fresh fruits in cans. Let no housekeeper neglect the opportunity, remembering that in providing an ample supply of these luxuries they are taking the best steps for preserving the health of their families."

SHEEP FARMING---THE DOG NUISANCE.

The March report of the Commissioner of Agriculture dwells upon the ravages committed by dogs among the sheep in the United States. In 1866 five hundred thousand sheep were killed by dogs, and their value was $2,000,000. The number injured was three hundred thousand, and the loss is estimated at $600,000. The number of dogs in the country is computed at five millions, their annual expense ten dollars per head, and the sum total of their subsistence fifty millions of dollars—an immense sum to bestow upon a class of animals the most of which are worthless, and many of them causing great mischief to the farmer.

This is certainly a state of things that needs a quick and sharp remedy. The wool trade is becoming one of the most important in the country, and with a view to its development duties have been imposed on foreign wools to an extent that affords the home grower an ample margin of profit were not his profits cut down by losses from the ravages made in his flock by dogs. It has been estimated that the aggregate expense of keeping dogs in the United States, a majority of which are worthless curs, foots up about the same cost as that of the maintenance of the criminals of the country, and about twice the amount that is paid for the support of the ministers of the different churches. All statistics of this kind being based upon rough calculations, are of course, in part, merely conjectural, but one thing is certainly proved—that dogs do an immense damage to sheep. They constitute a great drawback to the success of flock-masters, and are a nuisance which should as quickly as possible be gotten rid of. The law of Maryland upon the subject is totally inoperative.—It is too complicated and cumbrous for effective use. It requires that the dog shall be detected in the act of killing the sheep—a thing that is very seldom possible—the flock being nearly always attacked at night. If, however, the dog be detected in the act, proof must then be made of the fact by the oath of the owner of the sheep, or of a competent witness, before a justice of the peace, and the master of the dog upon complaint made to him, and information of such proof, is required to kill him. If he refuses, the owner of the sheep may kill the dog, or apply to a constable to do so. In this latter case double the value of the sheep destroyed may be recovered, otherwise nothing. This law is therefore practically worthless, and recoveries under it are very rare, although losses of sheep in Maryland, taking into consideration her low rank as a sheep-raising State, have been very heavy. Cecil county lost in 1865 three hundred and nine head of sheep killed by dogs, and in St. Mary's county this year quite a number of farmers have lost from ten to thirty head and one as high as sixty from the same cause. The *St. Mary's Gazette* very truly says: At this rate of destruction it will not take long we opine to exhaust what remains of sheep in the county. Unless also this destruction is arrested, farmers will be compelled to abandon raising this kind of stock.

There is no reason whatever why a tax should not be imposed upon the worthless curs infesting the State, and no more effectual means of diminishing their number could be devised. On the other hand, if a dog is really valuable his owner cannot reasonably object to paying a small sum annually for his protection. England has derived a considerable revenue from a dog tax, and it is regarded as one of the most just and least oppressive of her taxes. But in our opinion no remedy would be so prompt and so efficient as a law making every owner of a sheep killing dog responsible for any damage the dog may commit. We do not think there would be any difficulty in this. A man is answerable for the trespass of his cattle upon the enclosure of his neighbor, and it is admitted in law that dogs are a species of property for which trover or trespass will lie. Very frequently the vicious propensities of a dog are known to its owner, and yet the animal is kept either through carelessness or wantonness or from a sentiment of attachment. The flock-master whose sheep are harried by such dogs may be entirely ignorant of the fact that his losses are attributable to his neighbors' curs, and may indeed be wholly unable to detect the perpetrator. Under a stringent law enforcing pecuniary compensation for damages, such dogs would either be speedily killed or kept chained. For no owner of a dog having such propensities, unless the man be of a malicious turn, would care to run the risk of the heavy penalties to which he would constantly render himself liable.

The Striped Bug.—Every gardener knows that this is a most destructive insect among melon, cucumber and other young vines, sometimes damaging the crop seriously. Many remedies have been suggested, some of them no doubt good in their way but troublesome. Now we have tried for several years another which has proved with us a complete success. Instead of aiming to drive away the insect by soot, ashes, &c., we pet it, or rather furnish it with food better than the young melon and cucumber plants. We sow around each hill at the time of each planting a few radish seed, and coming up about the same time, the tops supply pasture for the bug which it much prefers to the vines. Lettuce will also answer, but the radish is rather liked the best. While our vines are untouched by making this little provision for it, the young radish tops are completely perforated. We can recommend the remedy with confidence.—*Ger. Telegraph.*

Our Agricultural Calendar.

Farm Work for July.

From the beginning of this month all the labor of the farm will demand the exercise of judgment, forethought and well directed skill and energy.—In this latitude it is the season of harvest, and unhappily owing to the coldness and backwardness, of the spring, the cultivation of the corn must be carried on simultaneously, with the operation of harvest, with high wages and not unfrequently an insufficient force of field hands, these double duties will press heavily upon our Farmers, and Planters, and yet so much depend upon the care with which the crops are harvested and the skilful manner in which they are housed, that no relaxation from constant, and it may be, severe labor is at this time admissible.—Every experienced farmer well knows the economy of pushing the harvest vigorously, of seizing the proper time to cut and of avoiding all unnecessary delay in stowing the crops safely under shelter. Thus far we have had a succession of rains with but few continuous days of entirely dry weather. If this peculiarity of the season should continue, the work of harvesting will be more than usually onerous, from the necessity of opening and spreading clover in the swath, and wheat in the shock. The utmost diligence therefore, and the utmost industry will be required, and not a day should be lost in pushing forward matters so as to bring the harvest to a successful conclusion. The work for the month is as follows:

HARVESTING GRAIN.

Good council can never be too often repeated even though it should occasionally be listened to by those who have heard it before. We therefore repeat in substance what we have not unfrequently urged on similar occasions. In the first place ample arrangements, whenever that is possible, should be made for putting the harvest through in the most expeditious manner consistent with the safety of the crops. It is a wise economy in such times to have good tools and in sufficient quantities to cause no delay if any accident should occur to some of those in use.

Harvest Hands.—If a change of hands is to be had, select only those that are really good and trustworthy, even though they may demand higher wages for their services, so much depends upon the rapidity and cleanliness with which the work is performed and the crops secured against damaging storms. If an extra price is required put on all the hands at once if they can be had, as it cost no more to employ six hands for three days than it does to engage six hands for six days, whilst the advantage of the six hands is that the work is done in half the time. A few words more. Overlook everything personally.

Time of cutting Wheat and Rye.—The best time for cutting all kinds of grain except barley, is when the straw below the ear begins to shrink and to turn a yellowish white. The kernel although apparently free can then be parted readily by the hand from its enclosing husk. If then it should be found on pressing it that no milk exudes, but that it turns out of the consistence of stiff dough, the grain is ready to cut. Repeated experiments have shown that none but the most beneficial results have accrued for early cutting, when the straws and grain were in the condition we have recited. The advantage to be derived from harvesting the grain before it becomes over-ripe are that—first, the grain will weigh heavier and will make more and whiter flour; second, there will be no loss from shattering; third, the crops can be secured in better condition; fourth, the straw and chaff will contain a larger amount of nutriment.

Harvesting Oats.—The best period for harvesting oats, as in the instance already cited of wheat, is before the straw has turned completely yellow and the husk begins to open. Oats should be suffered to dry in the swath, and the less they are raked and handled the more perfectly they will be saved, as the grain shatters freely. In raking and binding choose the early morning or as soon as the dew is off, and toward sunset in the evening, as in the middle of the day the straw is brittle and the loss of grain by waste is much greater.

Harvesting Barley.—Barley forms an exception to the rule laid down above as respects the time of harvesting. Barley should be cut when the grain is fully ripe, but before the heads drop. Barley does not mature well in swath but shrivels, and loses some of its valuable properties for malting purpose.—When the ears of Barley begin fairly to bend over the harvest should commence, but not before, as even then the heads are more or less brittle. The raking, as in the case of oats, should be done of a morning and evening. As the grain has matured a slight dampness will not injure the crop, and it may therefore be carried to the mow at once.

Hay Harvest.—We have already advised in previous numbers of the *Farmer*, that clover should be cut as soon as about half the heads are turning brown; after cutting it should be heated in swath as lightly as possible. It should not be scattered but turned under, and should be put up into cocks from the swath itself. With respect to other grasses they should be cut when the grass is just going out of blossom. Cut the heaviest grass first, to avoid danger from sudden rain storms, and from lodging. Whenever it is possible, the hay harvest should pre-

cede the grain harvest, as it is of great service to the farmer to secure his hay crop before the labors of grain harvest press upon him.

SOWING MILLET.

Millet may still be seeded up to the 10th of this month. For suggestions in regard to this crop see the June number of the Farmer.

WET MEADOWS.

It is very doubtful whether during the present season much can be done in the way of ditching and draining. If however the condition of the corn crop admits of its being laid by after the grain harvest has been brought to a close, an opportunity may occur to do some work upon wet meadows with manifest advantage to the future quality of the herbage in them.

FALL POTATOES.

These must be carefully attended to by frequent cultivation, by bringing fresh earth to the vines and by keeping down all weeds and grasses.

CULTIVATION OF CORN.

In ordinary seasons the corn ought to be in a condition to lay by during the period of harvest. But the present season has been so unpropitious that the cultivators will have to be kept running constantly. The great object in raising heavy crops of corn on fertile soils is to keep the soil light and loose by frequent stirring all through the growing season, and to extirpate all weeds. Thorough tillage and a favorable season are the two essentials in the production of a good corn crop.

FALL TURNIPS.

The seeding of turnips for fall use should not take place until about the first week in August. But due preparation should be made beforehand. The ground should be ploughed deeply and well manured either broadcast or in the drill. Of all the commercial fertilizers those containing an abundance of the phosphates are the best for turnips.

Quantity of Seed to the Acre.—One pound of seed to the acre will be amply sufficient.

How to Destroy Caterpillars on Fruit Trees.—The following mode of destroying the insects injurious to fruit trees, communicated to me by M. Scheffer of Modling, is so simple and yet so efficacious, that I cannot do better than to lay it before my readers:

M. Scheffer lays loosely rolled-up pieces of old cloth or blotting-paper in the forks of his trees. The caterpillars eat during the night, and while the dew is on the leaves in the morning, but they seek protection from the heat of the day, and creep into these rolls for that purpose. Thus it is only in the middle of the day that these rolls should be examined, and the caterpillars concealed in them destroyed.—*Kollar.*

Garden Work for July.

We have no suggestions to offer this month, as the chief work to be done is to push forward the crops that are already in the ground. As some of the earliest crops have been removed, the first attention should be to clearing off the beds on which they grew, and preparing them for subsequent use. The work to be done is as follows:

Planting out Cabbage Plants.—After the soil has been liberally manured and thoroughly spaded and raked, choose a moist, cloudy day for planting out cabbage plants for fall and winter use. The Flat Dutch and Savoy should be preferred for this purpose.

Cucumbers for Pickles.—Prepare a bed and plant out cucumber seed for pickles.

Cauliflower Plants.—Set these out on a moist day.

Endive Plants.—These plants may still be set out and fresh beds seeded at intervals of a week for succession.

Melons for Mangoes.—Prepare a bed and plant melon seed for mangoes during the early part of the month.

Dwarf Beans.—Choose a shady part of the garden and continue to sow at intervals of ten days dwarf beans. Water the plants occasionally as soon as they appear above the surface, and invariably choose the early morning or after sunset for this purpose.

Small Salading.—Sow the seeds of small salading at intervals of ten days for a continuous supply.

Setting out Celery Plants.—Celery plants for the principal crop should now be set out.

Turnips.—It is too early to plant turnips, but the ground should be prepared so that seeding may commence during the last week in the month or early in August. Make the soil rich, dig it deep and sow broadcast or in rows. The purple top turnip is the best for family use.

Ruta Bagas.—This crop may still be seeded from the 1st to the 10th of July. It is a hardy root, and as a spring vegetable is exceedingly nutritious and deserves to be brought into more general use. The cultivation is in every respect similar to that required for the white turnip.

Lettuce.—Set out lettuces to head. Water well in dry weather either in the morning or the evening, the latter time being preferable. Sow seed for succession every ten days.

Spinach.—Get ready a bed for spinach for fall use. A few drills will be sufficient for this purpose. The ground must be made rich and should be spaded deeply and thoroughly broken up.

Radish.—Sow the seed of the turnip rooted radish occasionally through the month.

Leeks.—Set out leeks.

Pot and Medicinal Herbs.—Slips of all kinds of pot and medicinal herbs may now be set out to form rooted plants. To facilitate their striking root set the slips in well prepared ground in a shady situation, choosing a soil that is rather moist in preference to one that is dry.

Peas.—Sow towards the close of the month a few rows of garden peas for a late crop. Choose a shady place for the bed and water the young vines well and frequently after they have made their appearance.

Savoy Cabbage Seed.—The seed of this fine cabbage may be sown in time for a winter crop up to the 10th of this month.

VEGETABLES.

Keyes' Early Prolific Tomato.—This new and very distinct variety originated with Mr. Charles A. Keyes of Worcester, Mass. The fruit is of medium size, uniformly smooth, solid, and of excellent flavor. It is very early. Grown with the Tilden and other leading varieties the past season in the grounds of Mr. Keyes, it ripened thirty days earlier than any other sort. The fruit is produced in clusters, from six to twenty in a cluster, and from seven to fifteen clusters on a vine, with the fruit not more than eighteen inches from the root of the plant.—The foliage is large,—entirely distinct in this particular from any other variety; some of the leaves often measuring eight inches in length by six in breadth. Being naturally of a dwarf, compact habit, it can be planted as thickly as potatoes; and may, on this account, prove a valuable variety for forcing. We consider it worthy of trial, and shall grow it extensively the coming season for an early crop.

Black Pekin Egg-Plant, introduced the past season by Messrs. Hovey & Co., is a native of China, as its name indicates. It is very distinct in its character. Fruit very large, round, and weighing from five to seven pounds each; plant erect, vigorous, without spines; leaves oblong, and of a dark bluish-black color, quite ornamental. Fruit of this new variety was exhibited at the Annual Exhibition of the Massachusetts Horticultural Society, and attracted considerable attention. Seeds of this new variety can probably be procured of seedsmen the coming spring.

Simon's Extra Early Beet, introduced last season, fully maintains its reputation for earliness; and is an improvment on the Bassano, being quite as early. Uniformly smooth, of a blood-red color, and turnip-shaped. Valuable as an early variety for the market-gardener.—*C. N. Brackett, in Journal of Horticulture.*

Rice on Upland.

The price of this valuable crop has ruled so high for years past, and likely to continue, that it will now be entirely feasible to cultivate it on good upland as a money crop. We have but a limited experience in cleaning, but we think every grist mill, whether driven by steam or by water, could attach a rice cleaning mill at a very trivial expense.

As to the mere production, it is as simple as to make corn, and we believe an acre can be cultivated about as cheap as the mass cultivate corn.

Take new land, if practicable, plow as well as possible, and if no better plan, stumps, &c., being in the way, lay off rows with a bull tongue plow, say two feet apart, then drill seed; if pretty good land, about one busbel per acre, as regular as possible and cover with a harrow. When the rice is well up, bar off, the old way preparatory to scraping cotton; then scrape off clean the whole bed that is left—rice, grass, weeds and all—scrape lightly but clean. Of course we should have said, after preparing the land as good as can be, sow the seed as early as it is safe to plant cotton.

In a few days after scraping the rice will be as high as it was before, and should have earth thrown in and around and about to keep grass down.

We prefer to chop out, leaving bunches about eight to ten inches apart. Then two hoeings, merely to scrape and thin, are all the hoeings that there is any use in. The plow can keep clean.

If rich land be selected, where cultivators can run, we see no reason why one hundred bushels should not be grown to the acre, and no more work than to make thirty-five bushels of corn. We should bed up land, say in two feet ridges, use a horse scraper, then chop out to stand, only cutting deeper than mere scraping.—*Ed. Southern Farmer.*

Planting Nuts, &c.—In replying to an inquiry as to the best time to plant nuts for growing trees, the *Germantown Telegraph* says that it should be done as soon as they come from the burr or pericarp, and of course before they get dry. This includes the chestnut, shellbark, walnut, acorn, as well as some seeds like the pawpaw, magnolia, &c., &c.—Hence they must be planted in the fall. If left until the following spring they will either not come up at all or be two years in doing so.

The Blight on Rose-Bushes, it is claimed, can be prevented by the use of sulphur, which as soon as the parasite shows indications of being at work, should be dusted over the bushes on a dry, sunshiny day, and repeated after a rain should the first application not be effectual. We believe there may be something in this, and as it is confidently recommended we shall give it a trial this season should there be any occasion.

THE POTATO BUG.

A correspondent at Lovettsville, Va., who has suffered greatly from this destroying insect, writes us under date of May 27th, 1867, as follows:

"As the people of our section are planting a great many Potatoes, we sincerely hope that some of your correspondents will give their experience and suggest plans to destroy the potato bug which has for the last few years been so destructive to the vines, divesting them of all their leaves, and even the sap of the stems completely exhausted, rendering it almost entirely lifeless."

There seems to be no remedy for this terrible scourge yet discovered, that has proved successful, save hand picking. The following extracts from articles published some time since in the *Practical Entomologist*, edited by B. D. Walsh, M. A., a very eminent Entomologist, gives about all we know as to the remedy or preventive for the ravages of this voracious insect:

"Almost the only remedy, hitherto found to be effectual against the depredations of the "10-striped Spearman," is hand-picking them either in the egg, larva or perfect state, or shaking the larvæ and perfect beetles off the vines into shallow pans; for which purpose a tin pan with a lid similar to that of a common spittoon would probably be found very convenient, as the insects might then be shaken through the central hole from time to time, as they fall into the pan, and thereby be prevented from escaping. Dusting lime, ashes, &c. upon the vines has been found to be perfectly useless, and both coal-oil and turpentine have been tried as preventives, and in the words of Mr. Hazen of Nebraska proved to be "no more use than so much water, as they soon evaporate."

Mr. Orin E. Priest, of Mosinee, Wis., however, has found that "turkeys are a perfect remedy for the potato-bugs;" and as the old-fashioned potato-bugs are deadly poison, and could not be eaten by turkeys with impunity, it seems to follow that his experience must relate to the Rocky Mountain insect, and consequently that this species had already in 1865 made its way, not only into Illinois, but also into Wisconsin. "I had," he says, "a patch in my garden literally covered with the bugs, which was all cleared off by turning in the turkeys three or four times. Also a piece in the field, in which I turned a turkey with a brood of young; and there they have kept them all off, and to-day there is no sign of a bug to be seen." (*N. Y. Weekly Tribune*, Aug. 29, 1865.) Turkeys have from time immemorial been employed occasionally for "worming" tobacco, the objection to which practise is that they injure many tobacco-leaves. As the same objection will not apply in the case of the potato, they may probably be found very useful assistants in combating the "10-striped Spearman." At first sight we might suppose that common fowls would answer an equally good purpose; but I am told by those who have tried the experiment that they are comparatively inefficient."

From an article on the "New Potato Bug," same author, we take the following:

"Hence, for those who grow potatoes in a small way, we are thrown back upon that most universal and infallible of all remedies against our Insect Foes—hand picking, whether in the egg, larva or perfect state, and brushing them into pans. But even this remedy, in cases where one's neighbors grow potatoes and allow the insect to increase and multiply without let or impediment, sometimes becomes practically unavailable, or in other words "costs more than it comes to." I know of several near Rock Island, Illinois, where the owners of potato-patches, after persevering in a course of hand picking for fully a month, finally gave up in despair, because as fast as they killed off their own bugs, a fresh supply from their neighbors' potato-patches keep flying in upon them. Indeed, so migratory are these insects in their habits, that I have scarcely taken a single walk in any direction this summer, without seeing one or more of them, either flying across my path, with their beautiful striped wing-cases and rose colored wings glittering in the sun, or crawling on the ground, or lit upon fences, weeds, &c. It really seems a pity, that like a certain portion of the fairest part of the creation, they should be at one and the same time so beautiful and so mischievous. I may add here that the Peach-blow variety of potatoes is less liked by these little pests than any other, and that so long as there are other kinds to feed on they will not feed on the Peach-blows.

But although hand-picking will probably still continue the only effective remedy, for those who grow potatoes on a small scale, yet, for extensive growers, machinery can be called into play to destroy the Bug. A horse machine for this purpose has already been invented in Iowa."

The following is a description of this machine, furnished to Mr. Walsh, by Dr. James Weed, of Muscatine, Iowa, who had seen the machine in operation:

The machine was invented by Mr. Benson, of Muscatine, Iowa, and he intends manufacturing it for next season's use. The cost will be about thirty dollars. It consists of a frame work, which moves astride the row of potatoes, on which is mounted longitudinally a reel somewhat like the one on McCormick's old Reaper, which knocks the bugs off the plants into a box on one side. This box is of course open on the side next the row nearly down to the ground, but is some two feet high on the outside and at the ends.—The reel works over the inner edge of the box, and the bugs are whipped off the vines pretty clean; and the most of them are thrown against the higher side of the box, which converges like a hopper over two four-inch longitudinal rollers at the bottom, between which the bugs are passed and crushed. These rollers are some three or four feet long.

Those insects which are perched low down on the plants are frequently knocked on to the ground; but I think they would soon crawl up again; and repeating the operation at intervals would very greatly reduce their numbers, and lesson very much the labor of hand-picking, which I think would be advisable in conjunction with the use of the machine, in order to destroy the eggs and diminish the young brood, which is most destructive to the foliage of the plant.

The following we also reproduce from the *Practical Entomologist:*

[FROM A LETTER FROM M. S. HILL, EAST LIVERPOOL, OHIO.]

The potato-bugs, *Lytta atrata* and *Lytta vittata*, have appeared in countless numbers about seven miles north of this place, to the great injury of the potato crops and to the great disgust of the farmers. Many are the expedients that have been resorted to, to rid the fields of the nuisance. I understand that the most successful method of destroying them was by placing, between the furrows or rows, dry hay or straw, and setting it on fire. The bugs were thus nearly all destroyed, and the straw burning very

quickly did not injure the vines. Might not this remedy be applied with success in the destruction of your *new* and *highly improved* Western Potato-bug?

Remarks by B. D. Walsh.—The "fire cure" for the Potato-bugs is quite a new idea to me; and in the case of these old-fashioned Potato-bugs it may likely enough answer a very good purpose, provided care be taken not to make too fierce a fire. The known efficiency of hot water in killing the Onion-maggot and the larva of the Peach-borer, without injuring the plants which those insects infest, proves that certain growing plants can stand, without any ill consequences, an amount of heat which is destructive to insect life. In the case of the new-fashioned Potato-bugs, however, the process would have to be repeated several times; for in this species there is more than one brood every year, and after a potato-patch has been thoroughly cleansed by hand, the very next day there will be a fresh swarm on it that has flown in from other quarters. I watched one of my neighbors, who had planted a town-lot with potatoes, turn in with his whole family and pick the bugs off every evening for about a month, till finally he became discouraged and gave up the job. Consequently the whole patch, like many others in my neighborhood, is nothing now but a mass of dead dry blackened stumps; and of course he will not even get his seed back.

From the same magazine, taken from a very able article from the pen of Henry Shimer, M. D., on the "Potato Bug," we clip the following:

"Regarding the natural means for their destruction with our present knowledge, the prospect is not very encouraging. Hand picking is tedious, but is the most practical method of disposing of them. The larva is very tenacious of life. I have seen them living after having been immersed in water for a whole day. When their food is scarce, they will devour the eggs and even prey on each other.

The potato rot was a great calamity, but this is far worse; and while so many plant largely of potatoes, and neglect entirely to pick off the insects, we must anticipate that they will spread from field to field, until the entire potato-raising portion of the Union is filled with, or overrun by them; their subjugation though not impossible appears very improbable."

The Tobacco Crop of 1866.—The St. Louis Democrat publishes some statistics of the tobacco crop of the present season. In Missouri it is reported at from 12,000 to 15,000 hogsheads. This is far below an average crop, but it is said that the quality of the tobacco is unusually good. In Virginia the crop has fallen off one-third—it is reported at 70,000,000—pounds but is the best ever made as respects quality. In some counties of North Carolina, lands which had been previously devoted to tobacco were this year planted with cotton. The yield for that state is 35,000,000 pounds. The yield in Maryland is placed at 25,300,000; Tennessee at 39,500,000; Texas at 90,000; Kentucky at 61,000,000; Alabama at 270,000; Arkansas at 1,700,000; Florida and Georgia each 600,000; Louisiana 40,000; South Carolina 35,000, and in the Northern States at 52,150,500 pounds.

WHEAT—MIDGE—EARLY AND LATE SOWING.

From the Eighth Census Report of the United States for 1860, we copy the following on the cultivation of wheat:

An English farmer once said to the writer, "Insure me a good crop of turnips, and I will insure you a good crop of barley, and of every other crop in the rotation." Of such value do British farmers consider the turnip crop as a means of enriching the soil for the growth of the cereal grains, that they spend more money in preparing the soil for turnips than for any other crop, frequently fifty dollars per acre. The turnip crop has justly been termed the "sheet anchor" of British agriculture. It enables the farmer to keep an immense stock of sheep and cattle, and thus enrich the soil; the ammonia which turnips obtain from the soil, the rain, and the atmosphere being retained and left on the farm for the use of the following cereal crops. In the Norfolk or four-course system of rotation, one-fourth of the arable land is sown to turnips, followed by barley, seeded with clover. It then lies one or two years in clover, followed by wheat at one furrow. After the wheat, turnips again follow, and so on as before. Latterly, by the use of *superphosphate* and *guano* for turnips, and by feeding large quantities of oil-cake and other purchased cattle food, the land has become so rich that many farmers have thought it necessary to introduce an extra grain crop into the rotation, in order to reduce the soil. But hitherto the rule has been never to take two grain crops in succession.

How different from this is the practice of some of our American farmers! Corn, barley, and wheat often follow each other in succession; then seed down with timothy, red-top, or some other exhausting grass; take off all the hay and then renew the process. To call this a "rotation of crops" is absurd. We might as well grow a crop of Indian corn every year.

We must alternate the cereals with crops of clover, peas, beans, tares, and other leguminous plants, or turnips; feed them out on the farm, and carefully save and return the manure to the soil.

In determining which crop to raise for feeding on the farm, we must not merely ask the simple question, "which crop will afford the most nutritious matter?" but, "Which will ultimately be most profitable, taking into consideration the effect of its growth on the soil, its value as food, and the value of the manure made by its consumption on the farm?" All will admit that to grow wheat to be fed to animals for the purpose of enriching the farm as the primary object would be a wasteful practice, no matter how low a price it brought in market; and to grow barley, oats, rye, and Indian corn for the

same object is wasteful also, though perhaps in a less degree.

In order to enrich the soil for the growth of the cereals, therefore, we must grow those plants which do not dissipate ammonia. We must feed them on the farm to stock; and if we use any grain or purchased food, it should be such, other things being equal, as contains the most nitrogen for the value of the manure; the quantity of ammonia it contains will be in proportion to the richness of the food in nitrogen. Many farmers think manure is manure, no matter how it is produced. If the elements which make rich manure are not in the food they will not be found in the manure, however carefully it is preserved or composted.

Horses fed on herdsgrass and oats might do more work, but their droppings would not be as valuable as though they were fed on clover-hay and peas, for the reason that peas contain twice as much nitrogen as oats, and the clover much more than the herdsgrass.

In determining which food to use, both these facts must be taking into consideration. In regard to feeding sheep, however, there is no drawback to the use of clover. Sheep do better on clover-hay than on any other, and it would be the height of folly to grow herdsgrass, rye grass, or red-top, or any of the natural grasses, for the purpose of feeding sheep. Clover impoverishes the soil less than the grasses; it contains more nitrogen, is at least equally fattening, and makes richer manure. The same may be said of peas and beans, as compared to oats, barley, rye, or corn. They impoverish the soil less, contain twice as much nitrogen, are equally fattening when judiciously used, and afford much more valuable manure. The same is true of oil-cake. It is quite as fattening as corn, and makes far better manure.

Whatever we do in raising crops, in fattening stock or purchasing cattle foods, let our object be to accumulate ammonia for the growth of the cereals, and their yield will soon be greatly augmented.

To avoid the midge, it is essential to get wheat in early. To attain this result, the land must be naturally or artificially drained. This is the first requisite, without which all others will fail. The best of tillage, manures, culture, and seed will be of little avail if the soil requires under-draining.

Other things being equal, wheat will be at least ten days earlier on land that is thoroughly underdrained than on that which needs draining; and it is a well-known fact, that if we could get our wheat into flower ten days earlier than usual we should avoid the midge.

Early sowing of late years has been very generally adopted as a means of getting wheat earlier; but in sowing too early there is danger from the Hessian fly. This insect deposits its eggs in the young wheat in autumn, and early-sown wheat is more liable to injury than that which is sown later. In the wheat-growing section of New York the time for sowing winter wheat is from the first to the twentieth of September. Formerly it was sown as late as the twenty-fifth of September, or, in some instances, as late as the first of October; but, since the advent of the midge, such late sowing has been abandoned. If the land is in high condition and well drained, from the tenth to the twentieth of September is, perhaps the best time to seed. Sown at this time, we stand a fair chance of steering between the two great pests of the wheat-grower. If we sow earlier, we run additional risk from the Hessian fly; and if later, the midge will most certainly destroy the crop.

The land being well drained, enriched, and properly prepared in good season, the next important point is the variety of wheat to sow. To avoid the midge, it must come into flower early. The variety most extensively grown in New York and Pennsylvania since the advent of the midge is the Mediterranean. It is a red wheat, originally of inferior quality, but much improved of late years by sowing in good early-wheat soil. Of white wheat the Soules is most extensively grown. It is, with the exception of the Boughton wheat, one of the earliest white varieties yet generally introduced. The Boughton wheat is extensively grown in Maryland and Virginia. It is from two to three weeks earlier than the Soules, and has been introduced into New York in the hope that its early maturity will protect it from the midge. This subject of getting an early variety of white wheat is attracting much attention, and there can be little doubt we shall be able to obtain a variety that will be early enough to escape the midge.

True's Potato Planter.—The testimony of one of our most intelligent and enthusiastic farmers was recently given for this new Maine invention, and a machine that deserves to be more generally introduced among our farmers than it is. In order to obtain a machine he purchased the patent right for the country in which he resided,—the agent would not sell a single machine—and the gentleman's testimony was that it paid for itself the first year. He planted twelve acres of potatoes and performed the work as easily with the planter, as he could have planted two acres by hand. This is a strong commendation in its favor.—*Maine Farmer.*

Cure For Scratches and Sore Backs.—A correspondent at Tarboro, Edgecombe Co., N. C., writes June 18th, 1867:—"While in the Confederate Cavalry service (Barringer's Brigade,) I found tar, grease and spirits of turpentine quiet effectual in scratches; travelling in dry weather improves it Calomel is good for sore backs which have proud flesh."

THE INDIA COTTON YIELD.

The following interesting statistics of the "India Cotton Yield," and "British Cotton Importation" we take from the *New York Mercantile Journal*, published weekly in New York city, whose commercial intelligence and elaborate market reports should recommend it to our business men :

While we are still debating the questions of all kinds that branch out from the grand main point of Southern "reconstruction" and arriving, we fear, at a satisfactory solution of none, the other countries that rival us in the production of the great leading staples of commerce are diligently improving the opportunity for their own profit.

Cotton still stands with us as the representative of a vast amount of our national wealth and without being "king" by any means, does and must for a long time to come, hold one of the highest places in the ministry of trade. Just now, it would be as good as hard cash to us, were the relations of interchange as they existed before the civil war restored. But Great Britain, France and Egypt, have been doing a good stroke of business in cotton culture, while our troubles have lasted, and, what with the current of trade setting into other channels, owing to the uncertainty of our supply since 1861, and the habit of using substitutes for the finest qualities of the American article once deemed indispensable, we find it no easy matter to regain our absolute ascendancy.

The cotton commissioner of India reports for the Presidency of Bombay, an increase in every item of production since last year. He returns 1,978,182 acres planted with cotton, of which 751,814 are under the "exotic" varieties, these figures exhibiting more area than in the year 1865–'66 cultivated for the superior kinds, and a little less than 1 per cent. increase for the "native" article.

The total result of cleaned cotton for the year 1866–'67 was estimated by the East Indian officials, 148,448 of 748 pounds each, or nearly 300,000 bales, of which 65,389 bales were of the exotic and other best varieties, and 83,059 were of the unimproved, although better class of the native plant, showing an increase of 125 per cent. on all the superior kinds, and 4 per cent. of the native sorts. The total money value of the crop in the Northern division of the Presidency alone is, authoritatively, estimated at $19,000,000. Moreover, in considering the whole amount likely to come from India, it must be remembered that, from the Central Provinces, Berar, &c., there is a very large and augmenting yield expected.

In the Northern district of the Presidency, the increase of area for 1866–'67, was 92½ per cent. of exotic cotton, subject to a decrease of 8 per cent. for the native plant. In the Southern division, the increase is 17 per cent. in exotic, and 7 in native cotton. The yield of the northern section was augmented 370 per cent., subject to a decrease of 12 per cent. in the native variety, and that of the Southern, was 27½ exotic, and 24½ for the indigenous article. This total is justly termed by the Bombay and Calcutta papers an "enormous" advance, and is ascribed as much to improved yield as to greater breadth of culture, Commissioner Walton stating that the exotic plant produced 70 pounds of clean cotton per acre, against but 36 pounds during the last season. The exotic article here spoken of is not to be understood as being a foreign article introduced, but is simply a better variety of the Indian cotton transplanted from Berar.

In the Khandeish, which is one of the finest cotton regions of the Presidency, the Dharwar, Egyptian, Peruvian, Sea Island, and even the New Orleans acclimated cotton, have failed in comparison with the Higunghat and Berar seed. Beside this transplanted native variety, the old Khandeish kind has dwindled to the proportion of 8 pounds and even Guzerat, the region of the far-famed "Surats" is likely to lose caste since the Khandeish district has come into the possession of such a treasure as the Comrawuttee seed. The region embraces, according to government reports, 1,406,088 acres of cotton bearing land, of which only 446,336 are under cultivation for it, and the return is probably not one third of what it will soon be made. On the other hand, these expectations would be greatly abated, if the rule of only one-third of the whole space being planted in cotton, in any one year, is to apply.

The East Indian producers, doing all in their power to compete for the chief prizes of the cotton market are, in Guzerat and elsewhere, improving their systems of cleaning and packing as well as of raising, on all sides, and a projected universal fair and exhibition of the staple at Broach, will probably show noteworthy ameliorations.

This intelligence should not relax the industry of our Southern producers. The fame which India has yet to toil for they have already won, and, under commonly favorable circumstances, they can keep the lead. But the same care, effort, study and expenditure, which were formerly applied in this country to the great staple, are now the daily principle of action in Bombay, and a rivalry based upon such foundations is not to be despised.

British Cotton Importation.

In our last we referred to statistics showing the effort that has been made of late years to encourage and keep up the production of cotton for the British market in India. We also showed the comparative success attending the culture in Khandeish and other great cotton districts, owing to improved methods and the introduction of better varieties of seed. We spoke of the Indian cotton as a formidable rival, in some grades, of the American, but, at the same time, expressed confidence that it would not, in the aggregate, be able to compete if the care and enterprise hitherto bestowed upon our staple in its best years should be continued. Some figures from the British official returns are at hand to confirm this view.

They show an increase in the amount paid for raw cotton imported into Great Britain to have been as much as £77,521,406 in 1866, against £29,-288,827 in 1857; a gain of nearly forty-eight millions and a quarter sterling in nine years. The total in 1865 was £66,032,193; £78,203,729 in 1864; £56,277,953 in 1863; £31,093,045 in 1862: £38,-653,398 in 1861; £35,756,889 in 1860; £34,556,636 in 1859, and £30,106,968 in 1858.

India alone of all the new cotton fields upon which so much time and money were expended, and of which glowing anticipations were formed, seems to have maintained a leading position, the Mexican, West Indian and Chinese districts having receded to the back ground. Egypt and Brazil were well represented during the past season, but India re-

mains the only competitor of real importance in the field against us. Still, the aggregate of her exportation is falling off with notable rapidity. In 1854 it was £38,214,723, and then fell to £25,005,856 in 1865. It is true that it rose slightly for the ensuing year, having been £25,270.547 in 1866, but the immensely greater growth of the American importation to Britain, deprives that fact of any special significance. Of the seventy-seven and a half millions paid last year for raw cotton, the staple of this country took up nearly thirty-five millions, the exact figure being 34,977,986 pounds sterling, while in 1865 it had been no more than £12,035,-484, and in 1864, during the height of our war, the comparative small fraction of £1,711,890. An increase from 1 to 34 in the head figures of a line of millions of pounds, no matter from what cause arising, is an overwhelming argument when effected in the space of two years time, especially if it be simultaneous with a decline at some other fountain of supply from 38 to 25.

The conclusion to be drawn from these figures is plain enough. Our beautiful American cotton is resuming its supremacy in the British markets, as it will ultimately do in all. The famines, drouths and pestilences of India will, under her present system of management and in the existing condition of her people, prove an insurmountable difficulty in her attempt to compete with us in this peculiar branch of culture, if our planters have sagacity enough, backed by sufficient capital, to avail themselves of their advantages. The situation of the East India field hands is almost insufferable already, and such labor as they have been giving cannot long be maintained under the same method of application.

Let us have tranquility and industry at the South, and the old source of wealth will be richer in the yield than ever.

FARMER'S CLUBS.

A. Willard Esq., gives the following description of the manner in which the members of the Little Falls Farmers Club, of New York, conduct their discussions :—Near the close of every meeting a subject is chosen for the next meeting, and some person or persons appointed to open the discussion. The opening speeches are made in the way most agreeable to the speakers ; either by written essays, or extemporaneously. After the opening speeches members carry on the discussion in a conversational way —asking questions, or giving their experience, without any attempt at speech-making. All that is sought to be obtained are the facts. Generally, members keep their seats, and talk in a familiar way, precisely as they would if meeting friends on the street, or at their own homes. Under this system, it has been found that much more knowledge is obtained than would be obtained if speakers were required to rise and deliver their experience, etc., in a set speech, since many who are willing to talk and answer questions could not be prevailed upon to rise and make a speech.

Half a cranberry bound on a corn will soon kill it.

PINDARS, OR GROUND PEAS.

We have seen, in some one of our periodicals, directions how to plant and cultivate the pindar, and as we have made this article by the acre, and seen fields of them, we differ from the writer.

Our direction is, heap up land deep and thorough, so as to pulverize thoroughly the land— of course, there are lands better adapted than others, light earth, not the heavy clays, would be our choice— then run off rows three and a half to four feet and bed thereto with a light furrow, making a flat bed. If the pindars be not hulled, break in two, so that moisture may more readily reach the pea, and after opening a furrow with a narrow plow, bull tongue, or even a piece of hard wood shaped like a bull tongue, drop the seed two in a place, two feet apart, about the time of corn planting, if not hulled—if hulled, later ; for frost will kill—then cover about two inches deep.

When the pindar is up, scrape as for cotton, then dirt as for cotton, keep clean, earth stirred with cultivator or sweep, and do not molest the branches, or put earth on limbs.

The bloom is always just above where a root puts from the limb on which the pindar is formed, the bloom is above the pindar on the rootlet in the ground, and it is just as wise to cover the bloom on potatoes as to cover the bloom on the pindar. We have seen large fields where the pindar was dropped in the same hill where corn was dropped, and both cultivated together. A friend, now deceased, who planted some two hundred acres of corn, in Mississippi, assured us he fatted his pork in his cornfield, where he always had pindars with his corn, and, though a cotton planter made meat for sale.

We have had sows too fat to breed, from our pindar patches, and we never cover vines and always gave about four by two feet as distance.—*Ed. Southern Farmer.*

How to Use Fish Guano.—This article is reckoned among the concentrated fertilizers, and is very rich in ammonia. It is to be used with the same precaution as Peruvian guano. It will destroy seeds, if brought in immediate contact with them. If applied in the hill, it should be mixed with soil. It may be sown broadcast, and plowed or harrowed in, with safety. If applied as a top-dressing, it should be intimately mixed with ten times its bulk of loam, peat, or muck, and be allowed to remain in bulk ten days or more.—*American Agriculturist.*

Solvent for Old Putty and Paint.—Soft soap mixed with solution of potash or caustic soda ; or pearlash and slaked lime mixed with sufficient water to form a paste. Either of these laid on with a brush or rag and left for some hours, will render it easily removed.

CULTIVATING YELLOW KNOLLS.

The treatment of these must be different from other land. Let me give my experience, with remarks: The field was one of two acres, isolated from the rest of the farm by a gully, the soil on the opposite side being of a brown loam on a dry subsoil. It was a ridge once growing hemlocks—a good crop—which the mellowness of the soil favored. There was some rye raised among the first crops; and, I believe, some potatoes. But the yield after did not pay expenses, till a new treatment was given the land.

After having laid in common for years, with but little profit to the vagrant cows, it was fenced off and fallowed. The first plowing was in June. The plow was run two inches deeper than it had ever penetrated. This brought up mellow ground, perfectly pulverulent. The reason why this ground was more mellow than the rest was no doubt owing to several causes, namely, the original fertility which the roots had never penetrated (only the tree roots to improve it by decay); and the less susceptibility to abuse in cultivating, which is the case with yellow soil, stirring it when wet; and the benefit which lower soil receives when leechy, as was this to some extent, being more or less sandy.

When the land was plowed it was as mellow as it is possible to get soil. In August a coat of long manure from the barn-yard was given it. This was composed largely of straw in a half-decomposed state; the rest was the cleanings of the stables.—In a few days it was plowed under, but lightly, probably not half the depth of the original plowing in June. But the ground pretty well hid the manure. The top soil now was composed largely of the mellow undersoil and manure. The ground was mowed—and a miracle took place. The main object in applying the manure was to secure a foothold for the grass. It was sowed in rye. The grain came up in due time, and made the greenest and finest spot in the neighborhood. A mat was formed. The stock was turned on it in the dry, fall weather, and thrived. When spring came, there was the same green. Though bare all the winter, its coat of roots and manure afforded a protection. So at least it seemed. It lay favorable to the sun, and soon commenced to grow, and outstripped everything. It was tall and close, reaching above a high fence; and the berry was of the plumpest, best kind. It was the best crop of rye that was ever known in the neighborhood.

Clover was sown on in the spring, very early.—In the fall there was as green a field of clover as of rye the fall previous. The spring following plaster was used plentifully. There was a crop of clover unmatched. The dry, well drained condition of the soil prevented the frost from having its usual effect, so that the clover retained its place. A crop was secured for hay, and the early harvesting induced us to try to secure another crop—one of seed. But as the seed failed, the cattle were turned in.—The next summer a crop of young clover started up. This was the result of pasturing the fall previous, re-seeding the ground. Grass seed had been sown with the clover, and this now also appeared. From this year dated the sod, which lasted for many years, reliance being put upon top-dressing. But the soil at last, partly through inattention, began to fail. It was re-plowed deeply and manured, and produced good hoed crops. It is now again in good grass.—Manure applied to the surface, whether harrowed in or slightly plowed, and other fertilizers used, are the most profitable way of treating such land.—*Rural New-Yorker.*

CULTURE OF HOPS.

I am thinking of setting out a hop yard, and would like to inquire:

1. What is the best kind of hops?
2. What distance ought they be set between rows and hills?
3. How should they be manured?
4. How should they be poled, with long or short poles? J. F. D.

Bradford N. H. 1867.

Remarks.—The hop crop has greatly increased latterly. In 1850 the whole crop of the country was 3,497,029 pounds; and in 1860, 10,991,996 pounds! Next to New York, Vermont raises more hops than any other State producing 638,677 pounds in 1860.

1. What is the best variety of hops, we do not know. They take their names from a variety of circumstances, such as the hanging of the fruit, the color of the vine, that is, the climbing stem. The grape hop takes its name from the manner in which it hangs, the cluster being close together, like a bunch of grapes. Those named from the vine, are the green, the white and the red. Others are named from places where they have been successfully grown, and some from persons who have raised them from seed. The plant is usually raised from cuttings in the spring.

2. The plants are usually placed in hills, at the distance of five or six feet each way, and should be set as early in the spring as the season will permit.

3. The hop plant loves a rich loam; the whole yard should be manured and the manure well worked in, because the roots extend themselves in every direction, and often quite deep in the soil. No weeds should be allowed to grow, nor the surface to become hard.

In the English practice, the first year's poles are about six feet in length, but twelve feet poles are afterwards used.—*New England Farmer.*

AGRICULTURAL FIGURES.

R. J. Stanton Gould, the retiring President of the New York State Agricultural Society, in his annual address, a few days ago, stated that the estimated value of the farms and stock of that State was 725,000,000; he thought $1,000,000,000 nearer the mark. He urged that the annual profits from these farms ought to be double what they are, and said that the average product of spring wheat per acre is only 7 bushels; of winter wheat, 13 bushels; corn, 28 bushels; potatoes, 93 bushels; and hay, 91-100 of a ton.

To show how intelligent and skilful husbandry would change such an exhibit, he had applied to Hon. Geo. Geddes, of Onondaga county, for statistics as to the average yield of his own and his neighbors' crops for a series of years. Mr. Geddes reported as follow: wheat 26 bushels; oats, 50; corn, 40 to 45; hay, 2 tons.

Based upon this showing, Mr. Gould estimates that $75,000,000 could be added to the agricultural wealth of the State by careful culture. Instead of progress, however, he asserts the average production is less than ten years ago.

Mr. Gould might have extended his observations throughout the country, and he would have found the same appalling decrease in the average product of our staple crops. Perhaps the average yield of wheat last year did not exceed five bushels per acre; suppose like Mr. Geddes', it had been 26 bushels per acre, the country would have been from two to three hundred millions richer on this crop alone.—And during the same year, that important staple, Indian Corn, was only about one-fifth of a crop, and the loss to the country may be safely estimated at $500,000,000.

We need not calculate the loss on other crops to account for the present prostration of this industry of the country. There can be no true prosperity in the face of a languishing agriculture—nor need we expect to see the wheels of commerce, manufactures and the trades, moving briskly until our staple crops are restored to their maximum product. In the existing state of the farming interest—when very little attention is paid to the permanent improvement of the soil—when the advantages of manuring, underdraining, subsoiling and deep and persistant cultivation, are ignored by the great majority of our agriculturists, whose minds are intent on cropping the soil to its utmost capacity, without restoring to it any of the constituents thus constantly removed—it is too much to hope that we can approach very rapidly, the high average of production reached by Mr. Geddes, John Johnston, and other first class farmers. As long as farmers can raise tolerably fair crops, they will not launch into expenses which consume their profits on the farm instead of allowing them to be invested in lands and mortgages.—But the disastrous experience of last year— and the present unparalleled wet season, will teach them practical lessons, and, we hope, ultimately lead to permanent and profitable improvements of the soil. *Working Farmer.*

Paint.—Take half a bushel of best white unslaked lime and slake with boiling water, keeping it covered during the process. Then add a peck of clean salt, well dissolved in clean water; three pounds of ground rice boiled to a thin paste and stirred in boiling hot; half a pound of clean glue, and five gallons of hot water. Stir it well and let it stand covered a few days. The glue should be dissolved by being well soaked, then put into a small vessel which should be hung in a larger one which is filled with hot water; this will melt it and keep it from burning. The paint should be applied right hot, which can be done by keeping it in a kettle or on a portable furnace. Any shade of color can be given by coloring matters, ochre, lampblack, Spanish brown, umber, &c., to suit the taste. A pint will cover a square yard on the outside of a house if properly applied, and will retain its brilliancy for years on stone, brick or wood. The east end of the President's house at Washington is painted with it.

The Curculio.—The editor of the *Germantown Telegraph*, says:—"We know of no other way to lessen the number of the curculio than by jarring the trees and catching the rascals in sheets. Removing a limb and striking the stump smartly with a mallet, is a good way of doing the jarring. All the so-called remedies are failures. We have tried everything likely to be effectual and found them to be worthless, and decline to try others daily being discovered, which are on the face of them absurd."

Smut in Wheat and How to Prevent It.—Take one pound of blue oil of vitriol—dissolve it in two or three quarts of boiling hot water, in some earthen vessel. Then put it in a pail and fill with cold water. Now take ten bushels of seed wheat, on the barn floor, and sprinkle this solution all over it, and shovel it thoroughly so that every kernel is wet, and in two or three hours it is ready to sow. You may keep it longer just as well, if you dry it and keep it from heating. This receipt is efficient, but if you have very smutty wheat you may raise a little smut the next year, but none after that.—*Cor. Co. Gent.*

Soap.—If 100 parts of tallow are mixed with 25 per cent. carbonate of soda, and heated to 360 degrees F. in a close boiler, a good soap will be formed. It was generally supposed that carbonate of soda would not combine with a fatty acid to form soap, and this is true at the ordinary boiling temperature of water, but not at a high temperature.

Tobacco for Lice on Animals and Plants.

In your paper of April 4th, a correspondent inquires, "What is the best method of killing lice on calves and cattle, and will the same thing kill fleas on dogs?"

I have found by experience that a strong decoction of tobacco, will destroy vermin on either animals or plants. I have used it extensively for many years, for destroying ticks on sheep and lambs; have dipped thousands of them in tobacco water, made by boiling coarse, damaged, cheap tobacco, or stems and waste, in water, and have found it effectual cure for the scab, which disease is caused by the working of an insect or mite in the skin of the sheep. It is a sovereign remedy for the blue lice on cattle and horses.

Tobacco water will destroy the aphis, or plant louse. Gardeners find their green-house plants need to be submitted to a deluging of this wash occasionally, to place them in a condition to become healthy and vigorous. When applied to fruit trees, if coarse waste tobacco is used, add one pound of copperas to five gallons of the wash. Plug tobacco contains copperas in quantities sufficient to kill any animal, who has not accustomed himself, by slow degrees to its use.

Almost every tree or plant is infested with an injurious insect, peculiar to itself, which preys upon its substance, and will, if in sufficient numbers, destroy its vitality. The hop, in sections infested with the hop aphis, is frequently either wholly or partially destroyed; when, by one or two thorough applications of tobacco water, by means of a force pump or garden engine, as they commence their work, the whole aphis army might be swept away. When the vine is trained low, upon seven feet stakes and twine, a garden engine is unnecessary, as the wash can be applied as effectually, and with less waste, with a common hand syringe.

Tobacco smoke will stupefy any animal, and, used in a sufficient quantity, has a fatal effect upon all which plug tobacco will destroy. Indeed, there seems to be but one animal—mammalia—upon which tobacco, in either shape, does not have an immediate fatal effect. However, if that animal would otherwise be infested with insects, even trichinæous in their nature, in the mouth, tobacco will keep them away. Perhaps that is their case.

If a sheep or calf is covered with a rubber or leathern spread, or thick blanket, and a smoke of tobacco is made under this covering, in half an hour or less every tick and nit will be destroyed. Currant worms may be served in the same manner. This is not only an effective remedy against vermin, but a good use for a most obnoxious weed.—F. W. Collins, *in Country Gentleman.*

BARNS.

Parson Colman of the *Rural World*, thus discourses on Barns:—We would like to preach a sermon to all our parishioners on Barns. We think they need a sermon on this subject—and it should be enforced in a positive style. There should be no milk-and-water sentiments or opinions uttered on a subject of so much importance to every Western farmer. Millions of dollars are wasted every year by the want of good barns. Grain and hay are stacked out in the fields, and exposed to the seasons, and damaged materially thereby. The waste and destruction thus caused would pay more than 25 per cent. interest on every judicious investment of money in barns on every farm in the West. They are an indispensable appendage.

Not only are they needed to store the grain and hay crop—but they are equally necessary to store the reapers and mowers, fanning mills, plows, cultivators, and all other farm implements, instead of letting them remain out exposed to the changing weather of the seasons. They are also needed to shelter horses and cattle, large and small, which will consume much less food and keep in far better condition when thus protected from the cold and storms.

You, who have not barns, by all means build them. If you have not money, borrow it. We don't like to advise any one to go in debt; but if barns can't be built without, borrow the money to build them, and the saving alone in two or three years will enable you to replace the money. Now is the time to build them—now is the time to provide storage for your crops. Build large, commodious, well-arranged barns, and you will never regret it.

Fire-Fanged Manure.

This is manure that has been thrown in heaps "to rot," to use a familiar term of the farmer, and has undergone a high process of heating, and has assumed a whitish, mouldy appearance. It is also very light as compared with other manures. Few farmers are aware of the immense loss thus sustained. In a careful experiment, I ascertained that unheated barn-yard manure increased a sweet potato crop a little over 100 per cent., while an equal quantity of fire-fanged made no appreciable difference. I am clearly of the opinion that a sufficient loss is thus sustained annually to pay the entire taxes of the people, or at least in the Southern States, not having much knowledge of what is done at the North. The fertilizing qualities, principally ammonia, are thus driven off, after which your manure is an inert mass, scarcely worth carting to a field. Therefore use at once, or if it be necessary to bulk, use loam as a compost, so as to prevent heating.—*N. C., in Am. Farmer.*

SODS AND WEEDS.

It should be a general practice with farmers to gather up all the sods, weeds, and even the year's growth of briars, bushes, &c., and stack them in large compact heaps, there to remain for from one to two years, or until they become properly decomposed, and resolved into one mass. It would take but little time to gather these, while in doing so the fields would be cleared of this trash, which, if left to remain, obstruct the growth of plants and encourage the increase of these drawbacks to growing crops. The "manure" which ought to be produced on a farm of an hundred acres by this process, would hardly be believed until properly put in operation. But we can say in advance that there ought to be realized, at the lowest calculation, *one cart load per acre*. This substance is extremely valuable for gardens, and especially for corn, as well as for soils of a heavy and tenacious character.

We have long been convinced that this part of a farmer's business has not nearly been so generally attended to as it ought to be. In the pursuit of agriculture there are as negligent and indifferent farmers as other business men. Some, indeed, appear to have no desire to succeed, or to make more than a mere from hand-to-mouth living; they never learn anything from the experience and example of their more energetic and thriving neighbors. *They know enough*, and hence are content to humdrum their lives away, leaving their children to pattern after them, unless they possess superior innate faculties of their own, and copy, in spite of the example of their parents, after those who have kept pace with the spirit of the age.

In passing through agricultural districts the observant person sees many different phases of farming. He constantly notices where the eye and hand of the intelligent, attentive and successful farmer belong. He requires no guide to point out to him where the soil as well as the mind has been improved. He sees no failure of crops there unless through the visitation of agencies over which man has no control.—Even severe drought has little effect upon his crops. Judicious manuring and thorough tillage and draining alone work these agricultural wonders. Who, then, who possesses the true spirit of the Farmer, will not go and do likewise?—*Germantown Tel.*

Salt on Land.—It will generally "pay" to put a moderate quantity of salt on any land, not near a large body of salt water. After plowing a field for any crop, salt sown evenly upon it, a barrel per acre will always "pay," although its immediate good effects may not be seen. John Johnston, the great wheat grower, of Geneva, N. Y. claims that a barrel or two of salt, spread upon his wheat lands, per acre after being plowed, will increase the crop five or six bushels.—*Rural American.*

SURFACE MANURING.

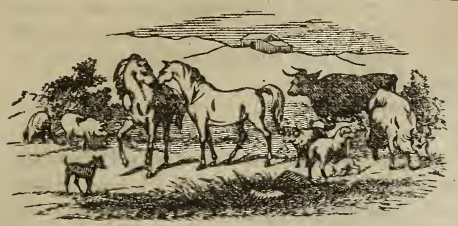
I believe in it. I cherish the belief that surface manuring is the way to manure. Every farmer aims to enrich his farm. Let me tell him in a few plain words how to do it, and then, after reading this plan, let him think over his past experience in farming, and see if it does not corroborate what is said here.

Apply manure chiefly to your tillage lands while in grass. By so doing you produce a strong, stiff sward, filled with grass roots. If these roots are of clover, so much the better. If you succeed in growing a good crop of grass on a poor soil you have done two things—made your land much better, and gained a good crop. As soon, or before the soil begins to show signs of failure, plough or manure again. If you plough, you have a wealth of grass roots decaying for the food of growing crops. Re-seed before the land gets exhausted, and do it bountifully. If you scrimp and starve elsewhere, don't do it when seeding to grass. Aim to have a sward as early as possible. To accomplish this you should seed liberally. When the sward is formed you have another crop of manure to plough under. In seeding land it is better not to be confined to one kind of grass. In this manner lands may be managed for centuries without any material deterioration.

As a further argument in favor of surface manuring I mention that it is nature's way. The soil is on the top of the earth, irrigation deposits its fertilizing elements on the surface. Manure applied to the surface is acted upon by the light, heat and rains—its elements are much more slowly evolved in the earth than on the surface. Every farmer should investigate this subject for himself and make his own conclusions.—*Cor. Canada Farmer.*

Hot Beds.—They are constructed as follows: A frame some twelve feet long and six feet wide will allow of four sashes, each three feet wide. This frame should slant from back to front, about six inches. The sides and end of the frame should be fastened to a post four inches square, placed in each corner. For the sash to rest and slide upon, a strip six inches wide is morticed into the sides of the frame. Sashes without cross bars are best, and the glass should overlap each other about one quarter of an inch. The bed should occupy a dry situation, with a Southern exposure, and protected by fence or buildings, on the north and west. The manure must be fresh stable manure, which has been turned and mixed several times, otherwise it would burn and dry up and become useless. When thus prepared, pile the manure, to the depth of two or three feet, on the place chosen for the bed, and cover with earth to the depth of six inches. As soon as the earth warms from the action of the manure sow your seeds, and you will soon have plants fit for use.

Live Stock Register.



MONEY VALUE OF BLOODED STOCK.

Fine or improved farm stock, is, among its kind, what improved machinery is in the production of fabrics of any class. A better article is produced at a cheaper rate. A well-bred Short Horn, or a Devon will beget a calf in a common cow worth, at the lowest estimate, one to two dollars more at six weeks old, for veal, than a common scrub—or ten to fifteen, or even twenty dollars when grown into bullock for beef. A Southdown or a Cotswold ram crossed upon the common ewe gives the same proportionate value to the lamb, or the wether. So with other improved stock, of whatever kind, excepting some, perhaps, which do not enter into consumptive articles, and are only bred as a thing of taste, or fancy merely.

Whoever commences to breed any kind of animals, should pay strict attention to the natural health and constitution of the female, for if delicate or diseased, what can be expected of the descendants? It does not suffice that the tender portion of the flock or the unthrifty part of the herd be better treated than the hardy ones, nor is it enough to nurse, physic and operate on sick and ailing infirmity. All of this class, whether they are mares, cows, ewes, sows or aught else, require to be 'stamped out.' It is folly to be in the habit of mashing and doctoring, unless it may be for accidents, and they will be few in every well regulated establishment. It is much better to get rid of everything poor and weakly, for there are those which cannot be kept in good condition with liberal feeding, they are totally unfit for propagating their species.

Happily for the stock breeder and grazier, the country is not overstocked with either cattle or sheep. Nor is it soon likely to be. Agriculture, instead of gaining on the other branches of human industry, barely holds its own, and with the new enterprises continually opening to the ambition of our young men, they are drawn off in too great proportional numbers to give agricultural labor or capital a preponderance of supply. They cannot, like the grains and other agricultural crops, be produced in a single year, but are the growth of several years, with food, labor and a very considerable outlay added. They are, therefore, not a temporary, but one of the permanent branches of our industry, indispensable to our consumption, and not to luxury that may be put aside without inconvenience or suffering. The population of the country must have meats, as well as bread and clothing, and for so much as they want, the demand is good always. As to prices, that must depend on the extent of the supply.

Any good judge of the points in cattle or sheep, studying the science of breeding, may bring his live stock to a high state of perfection, if he obtains thoroughly good males, and then continually weeds out inferior females.

It should be constantly kept in mind that it is not the peculiar excellence of single animals that wholly determines their value upon the farm. A perfectly well formed native cow yielding a generous supply of milk, is justly prized for her individual qualities; but the owners can not with any degree of certainty, expect her qualities to be transmitted to the next generation. Of course her calf will be more likely to prove good than one from an ill-favored dam, but the deficiencies of her ancestors may crop out in an unlooked-for degree and render the progeny comparatively worthless as a breeder. It requires many years of careful management to fix the qualities of a breed of animals, so that they shall be repeated in the progeny. There must be a counter-balancing of points, and overcoming of deficiencies, by proper selection of sire and dam for many successive generations.

Suppose a herd of two hundred dairy cows which at the beginning may be grades picked up here and there, by using a bull of pure blood, and being particular to have him out of a cow good for milk, as well as of fine frame and good pedigree, the next generation may be improved for both milk or beef. Thus when the whole original animals have been replaced by young stock, descended from the most healthy and the best milch cows, it is quite reasonable to expect they will make $20 each per year more in butter or cheese than the former old lot of cattle, which would be a difference of $4,000 per year, saying nothing about the increased value of the herd, which would not be less than another $4,000 gained this way. One bull would produce this effect, as by confining him in a yard or paddock, and taking the cows to him, there need be no more connections with 200 than there would be with 20, if he run unrestricted with the lesser number. Many instances can be adduced where bulls have got more than 200 calves per year without any injurious consequences.

To every farmer who proposes to raise but a single calf, we would say secure the services of the best blooded bull attainable, and continue to do so; in ten years you will find your account in it.—*Cor. American Stock Journal.*

RESULTS OF FATTENING.

The following statement of an experiment in cattle-feeding was communicated by Count V. Reidelsee, Eisenbach, for the agricultural journal of Hessia, and is translated for this report.

The cattle represented in these tables were weighed every four weeks. Their food was of good sound quality, seasoned at the end of the week with one-fourth pound of salt per head.

Number of oxen	Weight at the beginning.	Weight at the end of the 1st month.	Gain during first month.	Weight at the end of the 2d month.	Gain the 2nd mo.	Weight at the end of the 3d month.	Gain the 3rd mo.	Weight at the end of the 4th month.	Gain the 4th mo.	Weight at the end of the 5th month.	Gain the fifth mo.	Total gain in five months.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
No. 1.....	1,070	1,110	40	1,170	60	1,300	130	1,400	100	1,490	90	420
2.....	1,085	1,140	55	1,160	20	1,250	90	1,360	110	1,480	120	395
3.....	1,100	1,170	70	1,280	110	1,410	130	1,510	100	1,645	135	545
4.....	1,050	1,100	50	1,180	80	1,225	45	1,250	25	1,340	90	290
5.....	965	985	20	1,060	75	1,100	40	1,230	130	1,370	140	405
6.....	935	980	45	1,070	90	1,150	80	1,250	100	1,350	100	415
7.....	965	1,025	60	1,110	85	1,190	80	1,235	45	1,285	50	320
8.....	985	1,025	40	1,070	45	1,090	20	1,150	60	1,215	65	230
9.....	950	990	40	1,040	50	1,120	80	1,150	30	1,190	40	240
10.....	940	975	35	1,040	65	1,140	100	1,210	70	1,260	70	320
11.....	920	930	10	1,000	70	1,120	120	1,250	130	1,380	.....	330
12.....	785	810	25	850	40	870	20	880	30	.....	.....	105
13.....	.....	.....	.....	.....	.....	820	.....	920	100	.....	.....	100
14.....	.....	.....	.....	.....	.....	.....	.....	750	.....	830	80	80
15.....	.....	.....	.....	.....	.....	.....	.....	800	.....	870	70	70
16.....	.....	.....	.....	.....	.....	.....	.....	750	.....	815	65	65
Total.....	11,750	12,240	490	13,030	790	14,735	935	18,105	1,020	16,160	1,115	4,350

The rations fed consisted of, for the first month, distillery refuse from 400 pounds of grain; 50 pounds chaff, mixed with 25 pounds cut provender, (straw;) 100 pounds hay, 40 pounds green malt.

For the second month, distillery refuse from 400 pounds of grain; 50 pounds chaff, 25 pounds cut provender, 100 pounds hay, 40 pounds ground rye, 40 pounds green malt, (or beans and peas.)

For the third month, as also for the next two, (fourth and fifth,) the same, only adding 10 pounds more of ground grains, peas or beans. The race in question is the *Vogelsberger*. Highest gain for the term of five months, 545 pounds; least gain for the term of five months, 230 pounds; highest gain for one single day, 3.61 pounds; smallest gain for one single day, 1.52 pound.

The oxen from 11 to 16 are not taken into consideration, as not being kept for the whole term. We found that the individual state of each single animal has much to do with its getting fat, some gaining more than twice as much as others, showing that the best animals ought to be kept. In the whole term of five months 4,350 pounds of live weight were gained, with 64,192 pounds of food. Therefore 14.7 pounds of food produced 1 pound, though the same will be produced by 7 pounds of some other kinds of food. No kind of food, however, should be employed of which more than 20 pounds are required to make one pound of meat.

Estimating 100 pounds of live weight as being worth ten dollars, the value would be $435. Therefore 642 cwt. of food produced $435 worth of meat, or per cwt. $6.77. This shows a fair pay for promiscuous feeding material, not to mention the gain of excellent dung. These rations in question were rather high in price, and I do not doubt that almost any other combination of food might do better.

In comparing my results with others I concluded to increase the addition of rich feeding matter towards the middle of the fattening term, and then decrease again, not however diminishing the amount of food to be consumed. I likewise found that feeding oil-cake, maize, brans, oats, &c., will increase the rapidity of fattening and not require as big a bulk, thus saving time and matter. All such and similar facts may be established by not neglecting to weigh the cattle.—*Agricultural Report.*

Sheep Shearing, &c. in Talbot Co.—A correspondent, A. W. Leeke, writes the St Michael *Comet*, as follows:—Seeing in your last issue, a communication in regard to sheep and the weight of their fleeces, I was induced to weigh my wool, with the following result: No. 1, 12 pounds; No. 2, 11¼ pounds; No. 3, 10 pounds; No. 4, 9 pounds; No. 5, 8½ pounds; No. 6, 8 pounds; total, 58¾ pounds. Six others, next best, as follows: 7½, 7½, 7½, 7, 7, and 6½ pounds.

One year ago I sheared from a young buck 16 pounds, and three ewes 12 pounds each; several others nearly as much.

I also have a young cow, scarcely average size, from which was made last week 8½ pounds of butter, besides we used in house and kitchen all the milk we wanted, quite fresh, getting very little cream from that.

A dog got into the sheep-fold of Gen. Singleton, near Quincy, Ill., not long since and destroyed four hundred dollars' worth of his valuable South Down sheep.

The Dairy.

PACKING BUTTER IN SUMMER.—A Vermont butter maker writes to the New York Farmers' Club, concerning packing butter to keep:

Pack it in well soaked tubs or firkins; put a little damp salt in the bottom and place it in a cool, dry cellar on a bench of wood 18 inches from the cellar bottom, and the same from the wall. Stone or earthenware does not keep butter well, as the moisture from the surrounding atmosphere in warm weather, condenses on such vessels and soon affects the butter. Put no salt on or between the layers.—Fill to within half an inch of the top, and place a clean wet cloth over the butter, and pack the edges down with a knife, and then spread thin wet salt over the cloth. Having made and dealt in butter for some time, the above mode of packing and keeping butter will be useful to many, and cause a smile of delight to the buyer.

STORING BUTTER IN A CELLAR.—A correspondent in one of our exchanges writes that 'during several years of our first farming in Iowa, we found it extremely difficult to preserve sweet, for winter use, the butter that we made during the months of June, July and August. We finally adopted the following plan, by which we are successful:—We, with a few minutes' work, settled large stone jars into the cellar bottom—it being sandy and dry—by putting nearly the whole jars into the ground, and packing the sand close outside, and the butter inside, taking especial care to keep it well covered, first with a thin cloth, then a thin layer of salt, and then a board with a weight on it, to prevent its being uncovered by accident. Last season we took an oak butter-firkin that would hold one hundred pounds, and painted it well outside, and inserted it in the ground beside the jars, and filled it with butter, which kept as sweet as we could desire. Persons who have a dry cellar, I think, will be amply compensated for their trouble by this process."

DEEP VS. SHALLOW MILK PANS.—Mr. M. A. Richardson, of Sherman, New York, says: Whether more cream can be obtained from deep or shallow pans, is an easy matter to settle, without even an experiment. It takes time for cream to rise; therefore, it will rise in a shallow pan sooner than in a deep one, and consequently, in warm weather, when milk will thicken in a few hours, shallow pans should be used, or the cream will be caught in the thickened milk and the skimmer won't find it. But in cooler weather, when milk will remain thin long enough for the cream to rise, deep pans are preferred by some. Even then sweeter butter can be made from shallow pans.

The Poultry House.

GAPES IN CHICKENS.—A correspondent of the *Practical Farmer* gives the following as his mode of treatment:

"I adopted a system several years ago that has proved very successful with me, and I take great pleasure in giving your readers the benefit of my experience. It is simply this: give the poultry no wet feed, but place clean water in a convenient position. I feed wheat screening to chickens just from the shell; they feed on the broken grains until they grow large enough to swallow whole ones. In the absence of wheat screenings, I presume that cracked corn, such as is used for hominy, would answer as well. Since I adopted this mode of feeding I have had no difficulty in raising chickens."

ANOTHER CURE BY SOMEBODY.—"My chickens died in numbers the past summer, and I tried a remedy that cured the sick, and none of them have died. I placed scraps of old rusty iron in the water they drank of." You can try it.

ANOTHER CURE FOR GAPES.—A correspondent in the *Germantown Telegraph* gives the following "infallible" cure for this prevalent disease:

"Take a horse-hair and make a loop—twist it up so as to make the loop small; then with the fingers open the mouth of the chick, and put the horse-hair down the wind-pipe; give it a few turns around, and pull out again, when there will be a number of worms adhering to it; repeat as often as any can be obtained, and my word for it the youngster will be quite well in half an hour.

The remedy is so simple and easily performed, and withal so satisfactory, that every person who has the care of fowls should be acquainted with it, and save the thousands of chickens which annually die from this very cause. I have heard of and tried many other remedies, but none seem to act in the windpipe (the seat of the disease) like the above."

It has generally been supposed that there would be a great difficulty in rearing chickens hatched in February and March, on account of the cold; but, with proper accommodations and conveniences, we have found it more certain than those hatched in June. Many persons fail in raising chickens for want of a little attention to them at this season of the year.

To have the poultry-yard profitable, the fowls should not be kept until they are old. There is no objection to preserving a favorite cock, so long as he is active and lively, but hens after three years will not produce as many eggs as those of one or two years. Much, however, is depending on the breed kept, so far as good layers are concerned.—*C. N. Bement.*

THE
MARYLAND FARMER
AT $1.50 PER ANNUM,
PUBLISHED ON THE 1st OF EACH MONTH,
BY
S. SANDS MILLS & CO.
No. 24 South Calvert Street.
CORNER OF MERCER,
BALTIMORE.

S. SANDS MILLS, E. WHITMAN, } PUBLISHERS AND PROPRIETORS.

BALTIMORE, JULY 1, 1867.

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Death of Hon. Isaac Newton.

The Hon. Isaac Newton, Commissioner of Agriculture, died at Washington on Wednesday evening, June 19th. The duties of the office will devolve until his successor is appointed, on John W. Stokes, chief clerk of the Department. Much has been said in ridicule of the late Commissoner, but there is no doubt that much has been accomplished by the Department under his management. The monthly reports have been very valuable, and the last annual report is a work of much practical value. Col. Horace Capron, of Illinois, and Hon. T. C. Peters, of New York, are spoke of as his successor.

An Old Turfman Gone.—Col. John P. Campbell, whose name has been a familiar and an honored one in turf circles, died at the Louisville Hotel on Saturday, June 8th, at 10 o'clock. He was formerly of Baltimore, but recently had been living in Alabama. Injuries received by being thrown from a buggy some weeks ago in Mobile, caused his death. Mr. Campbell's name has been associated with such celebrated four-milers, as Wagner, Sue Washington, Laura Spillman, Jack Gamble, and a host of others.

The First New Wheat.—The first new wheat received in Baltimore this season was offered at the Corn Exchange on Friday, June 21st, by Messrs. Seevers & Anderson. The lot comprised sixty bushels red wheat, raised by Major James Pagan, of Chester, South Carolina. The quality was good, the grains being well filled, and color bright.—Messrs. N. A. Gassaway & Co. purchased the lot at $3. 30 per bushel. Considering the present decline in the price of old wheat, this is looked upon as a very liberal price. So far, all accounts received from the South in reference to the wheat crop give assurance of a most abundant yield. The crop in Georgia, it is said, is very heavy, and some estimate that nearly a million bushels of good wheat may be expected from that State alone the present eason.

SHORT TRIP TO OHIO AND KENTUCKY.

Having recently returned from a very agreeable trip to Cincinnati, being called thither by private interests, and meeting loved ones who are really "missed at home," we decided whilst there to attend the great sale of thorough-bred and trotting stock which was announced to be held on June 12th, by R. Aitcheson Alexander, Esq., of Woodburn Stud Farm, Kentucky, of whom and of whose place we had heard so much. We deem it not out of place to lay a few brief jottings of what we saw and heard before our readers, even at the risk of proving tedious.

Our route lay over the Baltimore and Ohio Railroad to Parkersburg; thence by the Marietta and Cincinnati Railroad to Cincinnati. Remaining here a few days with *our* S. Sands Mills, Jr., we took the cars for Lexington, Kentucky. Here we quartered ourselfat the Phenix House, an excellently kept establishment, where we were pleased to greet our friend L. H. Tucker, Esq., one of the editors of that sterling and popular old agricultural weekly, "*The Cultivator and Country Gentleman*," of Albany, New York. Of course the presence of such *distinguished* visitors could not long remain a secret, and in a short time we were courteously invited by Wm. Warfield, Esq., to inspect his valuable grazing farm near the city, and his noted herd of Short Horn cattle, of which he has about ninety head.

WM. WARFIELD'S GRAZING FARM.

The estate of Mr. Warfield contains about 800 acres of land, covered with rich pasturage—only about 150 acres of which are in cultivation in corn, wheat and hemp. His magnificent herd of Short Horns was equal to anything we have ever seen, and many of them were especially conspicuous for their beauty. Noted among the cows was *Lucy 2d*—red and white—calved June 19th, 1855, by Renick, 1st dam Lucy, by Young Ormet. We were especially pleased with *Maggie Taylor*—red and white—calved January 30th, 1866, by Dick Taylor—1st dam Maggie Lesley, by Clarendon, &c. Also *Loudon Duchess 2d* —red and white—calved February 26th, 1865, by Duke of Airdrie—1st dam Miss Wiley 4th, by 2d Duke of Athol, &c. These certainly were splendid specimens of this breed, and we were informed that $1,000 in gold had been refused for either of them. It is from this herd that Ross Winans, Esq., of Baltimore, derives his main supply for his great Dairy.

Mr. Warfield has also small flocks of superior Southdowns and Cotswolds. He presented us a clipping of wool from a 2-year old Cotswold buck measuring 15 inches, and of beautiful texture, which is now on exhibition in our office with other specimens. We noticed also a number of fine Berkshire hogs.

His fields of the celebrated blue grass, of this region, were very luxuriant—some of them were sown with clover and timothy. No fertilizers are used, save the droppings of the cattle, and the green sward is turned under every two or three years. A writer speaking of this blue grass (*poa pratensis*) says:

"This is the great grazing grass. It starts early. Sheep are often turned to pasture by the 10th of April. It ripens about the middle of June. During the months of July and August it makes but little growth; and if the summer is very dry, none at all. A pasture that would graze one hundred bullocks abundantly through May, June, and the first half of July, would lack very greatly of carrying them through the following six weeks, or until the first of September. If no other pastures are to be had, the best way of remedying this difficulty is to pasture a field pretty closely until the 1st or middle of June, and then remove the cattle from it, and it will start up and remain green through August. If not pastured at all until the middle of July, it would still make good pasture for this dry period; but not so good as if pastured off in May; and then it is liable to another objection—there is so large an accumulation of grass that it will burn like a prairie if fire gets into it.

This grass makes a very fine growth during the months of September and October. This grass grazes very profitably during the whole of the winter months, and is the best grass for this purpose known to our graziers. To make the best winter pasture, the spring crop should be pastured off close, until about the 15th or 20th of June. Some keep their pastures, intended for winter, from the first of May. This would probably give a greater amount of grass per acre, but would not be in so green and palatable a state as if the spring crop were pastured off, and it would be liable to burn in August if fire should chance to get into it. On such pastures I winter all my horses, except those at work; sheep also, except the snow gets very deep; cattle also, except in times when the snow is deep."

WOODBURN STUD FARM.

After receiving the kind attentions of Mr. Warfield, who took great pains to show us everything of interest, the next morning we took the cars for Woodburn Stud Farm, the celebrated estate of R. A. Alexander, Esq., where the same kind reception awaited us. Mr. A. is an exceedingly agreeable gentleman, but we regret to say that in his absorbing care to preserve the purity of blood of valuable stock, he has neglected to consider the transmission of his own, remaining as he does a batchelor up to the present time. His genial manners, proverbial hospitality and ample fortune we should think, however, would render it no difficult matter even now to remedy this little oversight.

The estate is magnificent in its proportions and its appurtenances, containing some thirty-five or thirty-six hundred acres of choice blue grass land, and the entire investment is set down by those who know at one million of dollars. From this the proprietor reports an income, as published in the papers a short time ago, of $39,000, or less than four per cent. But as Woodburn does not embrace his entire fortune, and as he has other sources of revenue, his neighbors do not apprehend his coming to immediate poverty. His net annual income, derivable from all sources, as published, was $108,500, a sum quite sufficient, one would think, to keep a prudent man well clad and tolerably well fed for a year at least, and to accept perhaps the burden of *other* responsibilities.

The farm is the most extensive of its kind in the country, and is amply supplied with extensive stables and shelter for horses, cattle, &c., of which he has large herds of Short Horn Durhams and Alderneys, with flocks of Southdowns and other sheep.

We were pleased to meet here S. W. Ficklin, Esq., and Major T. W. Doswell, of Virginia, Dr. J. P. Thom, of Baltimore, Dr. W. R. Capehart, of North Carolina, Major J. G. Ballentine, of Tennessee, Major A. Keene Richards, of Kentucky—the original importer of Australian—and others, who were attracted from a distance by the extensive offerings of blooded and other stock. We also made the acquaintance of James L. Miller, Esq., Secretary of the Kentucky State Agricultural Society, and editor of the "*Farmer's Home Journal*," a first-class agricultural and literary weekly, published at Lexington, Kentucky. There were also on the ground General Buford, Wm. Warfield and Jeremiah Duncan, an old and prominent stock raiser of Kentucky, and many others whose names have escaped us.

There were offered at the sale, which is annually held, thorough-bred and trotting stock, Alderney cattle, &c.; but few of the Alderneys were sold, they being bought in by Mr. Alexander. The upset prices put upon some of the animals caused some dissatisfaction, but we do not see why the owner

is compelled, simply from the fact of being an owner, to submit to a sacrifice—though it might more properly be announced in the catalogue, which would obviate all unpleasant feelings.

We subjoin a full list of the animals sold, names of purchasers, and prices brought:

THOROUGH-BRED AND TROTTING BROOD MARES.

No. 1.—Hilario, chestnut mare, foaled 1848, by Imp. Glencoe. Col. John R. Viley, Ky., $200.

No. 2.—Young Clipper, chestnut, foaled 1851, by Oliver. Jno. W. Ballentine, of Tenn., $162 50.

No. 3.—Slipper, chestnut, foaled 1855, by Imp. Yorkshire. Col. J. R. Viley, Ky., $305.

No. 5.—Daisy, black, foaled 1856, by Cracker. S. W. Ficklin, Charlotte, Va., $375.

No. 7.—Miss Myrtle, chestnut, foaled 1859, by Scythian. Wm. H. Bass, Mo., $255.

No. 8.— Lintona, bay, foaled 1860, by Imp. Scythian. Maj. J. P. Thom, of Baltimore, $180.

No. 9.— ——, brown, foaled 1861, by Charley Morehead, S. W. Ficklin, of Va., $175.

No. 10.—Buena, bay, foaled 1861, by Edwin Forrest. S. W. Ficklin, of Va., $300.

No. 12.—Garland, bay, foaled 1863, by Uncle Vic. Maj. Thom, of Baltimore, $500.

No. 13.—Adelaide, gray, foaled 1864, by Lexington. Wm. H. Bass, of Mo., $415.

No. 14.—Redowa, chestnut, foaled 1864, by Bill Cheatham. G. W. Stewart, Shelby county, $230.

No. 15.— ——, chestnut, foaled 1864, by Imp. Australian. S. W. Ficklin, of Va., $260.

No. 16.—Rosa, bay, foaled 1864, by Star Davis. Maj. T. W. Doswell, of Va. $400.

No. 17.— ——, chestnut filly, foaled 1864, by Imp. Australian. W. H. Johnson, Nashville, Tenn., $200.

THOROUGH-BRED COLTS.

No. 1.——, chestnut, foaled 1864, by Lexington. W. H. Johnson, Tenn., $355.

No. 2.— , Marshfield, chestnut colt, foaled 1864, by Imp. Australian. Michael Welsh, Woodford, $230.

No. 3.——, chestnut colt, foaled 1864, by Imp. Australian. S. W. Ficklin, Va., $210.

No. 4.——, chestnut colt, foaled 1864, by Vandal. S. W. Ficklin, Va., $190.

No. 6.——, bay, foaled 1865, by Imp. Australian. T. W. Doswell, Va., $150.

No. 7.——, bay, foaled 1865, by Imp. Australian. Col. Thomas Buford, $225.

No. 9.——, bay, foaled 1865, by Imp. Scythian. G. W. Stewart, Shelby county, $100.

THOROUGH-BRED COLTS, FOALED 1866.

No. 1.— ——, bay, by Lexington, Dam Kitty Clark. W. H. Johnson, Tennessee, $500.

No. 2.— ——, bay, by Ulverston, he by Lexington. Dr. W. R. Capehart, Edenton, N. C. $225.

No. 4.— ——, bay, by Lexington. J. R. Viley, Fayette, Ky., $610.

No. 5.— ——, bay, by John Morgan. R. Lyle, $170.

No. 7.— ——, chestnut, by Lexington. G. W. Stewart, of Shelby, $705.

No. 8.— ——, chestnut, by Imp. Australian. J. W. Williams, of N. Y. $350.

No. 9.— ——, bay, by Imp. Australian. J. G. Ballentine, Memphis, Tenn., $105.

No 10.— ——, bay, by Swigert's Lexington. J. C. Alloway, of N. Y., $110.

THOROUGH-BRED FILLIES, FOALED 1866.

No. 1.— ——, chestnut, by Imp. Australian, dam Mattie Gross—$300. D. Swigert, Woodford.

No. 2.— ——, bay, by Imp. Australian, dam Rescue—$170. W. H. Johnson, Tennessee.

No. 3. ——, bay, by Imp. Australian, dam Grisette—$290. Col. John R. Viley, Fayette.

No. 7. ——, brown, by Swigert's Lexington, dam Maria Innis—$170. Maj. T. W. Doswell, Virginia.

No. 9. ——, chestnut, by Imp. Australian, dam Fanny G —$200. J. M. Vanmeter, Lexington.

No. 11. ——, bay, by Hunter's Glencoe, dam Red Rose—$150. S. W. Ficklin, Virginia.

No. 14. ——, grey, by Imp. Australian, dam Bonnet—$160. Vincent Moore, Woodford.

No. 15. ——, by Imp. Australian, dam Slipper—$130. S. W. Ficklin, Virginia.

No 16, ——, by Ulverston, dam Kate Quinn—$300. John Harper, Woodford.

TROTTING FILLIES.

No. 2 ——, bay, foaled 1865, by Abdallah. Robt. Bass, of Mo., $220.

No. 4 ——, chestnut, foaled 1865, by Pilot, Jr. Wm. H. Bass of Missouri, $350.

No. 5 ——, gray, foaled 1865, by Pilot, Jr. F. H. Stewart, Chicago, $335.

No. 6 ——, bay, foaled 1865, by Ruric. W. H. Bass, of Mo., $240.

No. 7. ——, chestnut, foaled 1865, by Imp. Australian. Major Thom, of Baltimore, $180.

No. 8 ——, bay, foaled 1866, by Edwin Forrest. Dr. W. D. Gay, Woodford county, $152 50.

No. 9 ——, bay, foaled 1866, by Odom's Scythian. Wm. H. Bass, of Mo., $100.

No. 11 ——, chestnut, foaled 1866, by Endorser, he by Wagner. J. A. Higgins, Fayette county, $135.

TROTTING COLTS.

No. 1.— ——, bay, foaled 1865, by Edwin Forrest. Jno. Jessie, Woodford, Ky., $150.

No. 3.— ——, chestnut, foaled 1866, by Edwin Forrest. W. H. Bass, of Mo., $200.

No. 4.— ——, bay, foaled 1866, by Edwin Forrest. W. H. Bass, of Mo., $145.

No. 5.— ——, bay, foaled 1866, by Edwin Forrest. Chas. Fleming, of Ky., $205.

ALDERNEY BULLS AND BULL CALVES.

No. 2.——, by Bob, dam Susan—$50. L. G. Eden, Boyle county,

No. 3. ——, by Bob, dam bred by B. J. Clay—$40. A. G. Herr, Jefferson county.

No. 4. ——, by Bob, dam Sylla—$45. L. G. Eden, Boyle.

No. 5. ——, by Gen. Putnam, dam Kizzy—$55. Wm. Boyle, Mississippi.

No. 6. ——, by Pilot, dam Beauty 2d—$50. J. R. Butler, Franklin.

Total amount of sale $13,117 50.

After the sale we visited the Training Stables, presided over by the celebrated Trainer ANSELL, an aged and venerable descendant of Ham, who was raised by the elder Doswell, of Va., whose son, Major Doswell, was in the party. Ansell took great delight in exhibiting the horses, and at the same time communicating much of interest in connection with the Turf. The old man boasted of being a Virginian of the olden school, and of Virginia as his birth place. Among the thoroughbred horses in training the following were exhibited, much to the gratification of the gentlemen present:

Lancaster—bay—foaled 1863—by Lexington, dam Blue Bonnet, by Imp. Hedgeford, &c.

Red Dick—bay—foaled 1863—by Lexington, dam Alabama, by Brown Dick.

Merrill—chestnut—foaled 1863—by Lexington, dam Miriam, by Imp. Glencoe.

Watson—chestnut—foaled 1863—by Lexington, dam Ann Watson, by Imp. Glencoe.

Bayswater—bay—foaled 1863—by Lexington, dam Bay Leaf, by Imp. Yorkshire.

Newrey—bay—foaled 1864—by Lexington, dam Novice, by Imp. Glencoe.

Alhambra—chestnut—by Lexington, dam Amanda, by imp. Glencoe.

Canada—chestnut—foaled 1864—by Lexington, dam Catalpa, &c.

Woodstock—chestnut—foaled 1864—by import. Australian, dam E. Wright, by imp. Margrave.

Dickens—chesnut—foaled 1864—by impor. Australian, dam Alabama, by Brown Dick.

The Training Track of Mr. Alexander, is in close proximity to these stables, and is one mile in extent.

From this point we wended our way to the stables of the renowned Stallions, LEXINGTON, ASTEROID, and Imported AUSTRALIAN—probably the three greatest horses in this country. They were exhibited by their several grooms upon the grounds set apart for exercising. Lexington, notwithstanding his age and blindness, still exhibits much of his youthful vigor. Asteroid, since his sad accident, is kept for the Stud, and is in excellent condition—and Australian is one of the noblest of his race. It was a rare treat to the lover of the beautiful, to witness so great a sight as these three renowned horses on exhibition at the same time. We never hope to look upon the like of such a trio again.

The Trotting Stock of Mr. Alexander is of superior character, and consists of a large number of Stallions and fillies, among which is Edwin Forrest, foaled 1851, by Bay Kentucky Hunter, he by Old Kentucky Hunter, his dam by Bogus, his g. d. by Messenger.

LOUISVILLE, KENTUCKY.

After remaining over night at Woodburn, we took the early train for Louisville, where we met our old Baltimore friends Thomas M. Swann and Arnold Wisobski, Esqs., to whom we are under obligations for attentions shown. We visited the Woodlawn Course,—a favorite racing ground—and the Agricultural Show Grounds, both of which are admirably arranged for the purposes designed, and our Maryland Society might be aided in laying out their grounds by an inspection of the same. We visited the beautiful Cave Hill Cemetery, which, favored by nature and embellished by art is, aside from its solemn associations, a most charming place—after which we strolled in the elegant granite Court House, and inspected the great Statue of Henry Clay, executed by one of Kentucky's gifted sons, whose genius and skill as elaborated in this master piece of art, has won for him an imperishable fame. It is said by critics to excel either of the Statues in New Orleans or Richmond, which were conceived by the same great artist—JOEL T. HART. This Statue was inaugurated on the 30th of May last with very imposing ceremonies. The occasion has been immortalized by a grand Ode from the inspired pen of George D. Prentice, which was sung by a choir of over 100 voices. We cannot resist the temptation to reproduce here the first and third stanzas:

Hail! true and glorious semblance, hail!
Of him, the noblest of our race—
We seem, at lifting of thy veil,
To see again his living face!
To hear the stirring words once more,
That like the storm god's cadence pealed
With mightier power from shore to shore
Than thunders of the battle-field!

* * * * *

Again, again, and yet again
He rolled back passion's roaring tide,
When the fierce souls of hostile men
Each other's wildest wrath defied.
Alas! alas! dark storms at length
Sweep over our half-wrecked ship of State,
And there seem none with will and strength
To save her from her awful fate!

We hope this Statue will furnish to later and we trust more appreciative ages, the very similitude of the great American Commoner.

After a pleasant sojourn in Louisville, we took passage on the magnificent steamer Gen. Lytle for a return trip to

CINCINNATI.

The Queen City of the West, as Cincinnati is appropriately termed, before whom a career of prosperity almost unlimited seems in store, is distinguished for her splendid structures for trade, her magnificent places of amusement, among which her Opera House is conspicuous, her handsome private residences and unsurpassed suburban villas; her immense manufacturing establishments, and all else that can be indicative of sure and progressive strides in prosperity.

Mount Auburn---Clifton Heights---Spring Grove Cemetery.

Whilst our visit was one of a purely private character, we availed ourself of the occasion to take a running view of all that was notable in it. A ride through Mount Auburn and Clifton Heights will amply repay the traveler for a view of the magnificent residences and beautifully adorned gardens and parks, which are certainly unsurpassed in this country. We visited Spring Grove Cemetery, which comprises about 418 acres, laid off in the most artistic manner with artificial and natural mounds. It contains beautiful groves and crystal lakes, upon which float snow white swans—chaste sculpture and monuments, among which is an elegant bronzed statue representing a full costumed Federal soldier grasping his firelock, which was inaugurated in commemoration of Ohio's dead who fell fighting in the late struggle, many of whose ashes now repose in this ground. Mr. Strauch the Superintendent, has won for himself a high reputation for the skill and energy displayed in making this a place notable for its beautiful landscapes, unmarred by a singls unsightly object.

Cincinnati Horticultural Society.

It was the 15th of June when we visited these handsome grounds, and found that the Cincinnati Horticultural Society were holding there their weekly exhibition and meeting by invitation of the Board of Directors. The exhibition consisted of Roses and Strawberries only, of which very fine specimens were shown. The roses consisted mainly of new varieties, many of which have been introduced this year from France. Among the latter was the Marechal Forey, grand in color and form. Mr. F. Pentland had on exhibition some 20 different varieties, among which were the Marechal Forey, Marechal Neill, Maria Boise, &c.

Mr. Louis Ritz's exhibition of strawberries was large and exceedingly fine, among which was the the White Pine-apple, almost white in color, and of very peculiar flavor, and seemed to be attractive to those who were to judge of its merits by the taste. George Graham, Esq., is President, and William Heaver, Esq., Secretary, of this association.

Clough's New Process of Refining and Deodorizing Saccharine and other Fluids.

We dropped in on our old friends Blymyer, Norton & Co., who are extensively engaged in the manufacture of agricultural machinery and cane mills, and were kindly received.—Here we met our editorial friend Wm. Clough, Esq., the best authority on Sorgo culture, &c., in this country, and editor of the *Sorgo Journal*, which is published under the auspices of the above firm. We were invited to his neat sanctum, and permitted an inspection of his laboratory, which was in full operation, aided by Mr. Day. He exhibited to us several very satisfactory experiments as to the quality of his new process of refining and deodorizing saccharine and other fluids. A company has been organized called the Clough Refining Company, and incorporated under the laws of the State of Ohio, for the purpose of establishing refineries, introducing the process to the public, and disposing of rights to use the same.

This refining and deodorizing process has been applied to the sirup and sugar of tropical cane, to juice of the sugar-beet, and to the juice and sirup of Sorghum canes. The effect produced is very remarkable. The gummy or glutinous substances contained in the solution, are suddenly and perfectly curdled or coagulated. As the coagulated matter contracts it locks up the earthy and other impurities, and all together subside to the bottom in the form of a compact sediment, leaving the fluid perfectly clear and transparent. This clear solution, upon being poured or drawn off, and evaporated to the proper density, affords a bright, thoroughly refined sirup, entirely devoid of acid and the characteristic Sorghum flavor, and with a taste and flavor closely resembling Maple sirup. No difference how foul and impure the original sirup or juice may be, the foreign matters are entirely removed by this operation leaving the solution absolutely clear and transparent. In operating upon crude sirup, it is first reduced with water to about the density of 15° Beaume; then refined, and subsequently evaporated to the proper density. With green juice, the operation of refining may be

performed at an early stage, or at any density, not much exceeding 15° B.

The apparatus required in addition to the ordinary evaporator, is very simple and inexpensive, and the refining materials used in the operation cost but a trifle. No waste or loss occurs in refining old sirup, as the sediment, from the first charge operated upon, may be washed with water, allowed to settle, and the wash-water containing the saccharine matter from the sediment, used to dilute the next charge of crude sirup.

The operation can be performed by any person of ordinary intelligence, after a few hours instruction and practice, the only points requiring particular attention being exactness in adding the refining materials, judgment in adapting proportions to different sirups, and neatness in handling the dilute sirup after it has been refined.

Dr. Antisell, Dr. Tilden and other prominent scientific gentlemen connected with the Department of Agriculture at Washington, speak in the highest terms of this process, and warmly commend it. The office of the Company is at No. 114 Main street, Cincinnati.

LONGWORTH WINE HOUSE.

Being an old subscriber to our *Farmer*, we took the liberty of calling at the celebrated Longworth Wine House, whose Catawba and other wines are so favorably known throughout the entire country. We were kindly received by Col. Anderson, the grandson of the late Mr. Longworth, and invited to inspect the premises and to test the quality of the several brands of wine, which we could not really find *courage* to decline, not liking to disclose our total abstinence habits. We found the wines produced from the grape of the Catawba, the Delaware and the Ives Seedling, exceedingly palatable and refreshing, considering the thermometer stood nearly 90 in the shade. We rejoiced afterwards in the discovery that it produced no ill effect upon our system, but on the contrary created an unwonted juvenility in the limbs that had been toiling through the rich Blue Grass fields of old Kentucky, whose sons—and some other people's sons, too—delight in the Mountain Dew that falls so bounteously in *Bourbon*.

As many of our readers who drink these famous and healthy wines know but little of the process of manufacture, a brief and imperfect description may not be inopportune. The Wine Press is a very simple looking machine, which is used for extracting the juice from grape. As soon as drawn off the press it is placed in casks or hogsheads, capacity from 1,000 to 1,500 gallons each, where it remains until the process of clearing and fermentation is perfected. The sediment is quickly precipitated to the bottom, and then drawn off as frequently as required. This is termed *must*, and is sometimes converted into an inferior brandy. Fermentation being completed, the wine is in condition for bottling. The Still wine is bottled just as it comes from the cask. Each bottle of the Sparkling wine is passed under a retort where a small quantity of a solution of rock candy is injected into it. The sweetening, coming in contact with the acid juice of the grape, produces a gas which in turn causes the effervescene noticeable in wines of this kind, and which is regarded as the life of it. This done the wine is ready for the cellars. It is here sorted and ranged in wooden racks, where it remains till ready for market, when it is packed in cases for delivery. There are two cellars entirely underground, with capacity for storing 200,000 bottles of wine. In some seasons heavy losses are sustained by the breakage of bottles containing the Sparkling wine. As high as 25 per cent. sometimes yield to the pressure. To lessen the waste resulting from this cause, gutters have been constructed underneath the racks, running the entire length of the cellars. These catch the wine as it escapes, and conduct it to vessels,—it is afterwards drawn off and used in the manufacture of brandy. There are several varieties of wines made at this Wine House, which meet with ready sale—some of which compare favorably with the best imported.

The cultivation of the grape formerly around Cincinnati was quite lucrative and extensively engaged in, but for several years back the crop has been a partial failure, owing to mildew and other causes, and manufacturers of wines have been compelled to seek other sources of supply. The Ives seedling, a new popular Western grape, which is early, hardy and healthy, is being extensively cultivated in the West, the manufacturers being satisfied it will produce a superior article of wine.

AMERICAN BUNG FACTORY.

The American Compressed Bung Factory was next visited. The machinery adapted to hurling out thousands of these bungs daily was invented by an old friend and Baltimorean, Mr. Josiah Kirby—each machine being capable of making from 40 to 45,000 per day. They are used in all the cities of the West, and many of the Southern and Eastern cities, and exported to England. They are used for pork barrels, lager beer casks, &c., and made of several sizes.—The inventor has realized a fortune from the sale of this simple article. It is, we believe, the only establishment of the kind in the United States.

Amply repaid for our trip, we now proceeded on our way homeward, fully convinced that there were more "things in heaven and earth," especially in the Western part of the latter, than "had been dreamed of in our philosophy."

We should do injustice to our own feelings and to the kind friends who so freely contributed to our comfort, if we did not make due acknowledgement for the numerous attentions we everywhere received. Nor must we omit to tender our thanks for courtesies received to Vice-President John King, Esq., of the Baltimore and Ohio Railroad, Asa B. Waters, Esq., of the Marietta and Cincinnati Railroad, Andrew Coe, of Coe's Superphosphate, C. Oldhaber, of the house of Woodrow, Mears & Co., Josiah Kirby, of Cincinnati, and others.

EDITORIAL NOTICES.

☞New subscribers can be furnished with *Moore's Rural New Yorker* and *Maryland Farmer* for $3.50. The annual subscription to the "Rural New Yorker," $3; "Maryland Farmer," $1.50.

☞Old subscribers can be furnished with *Moore's Rural New Yorker*, (the best weekly of its kind in this country,) by sending us $2. Their subscriptions can begin at any time.

☞Specimen copies, both of the "*Rural New Yorker*" and "*Maryland Farmer*," sent free on application.

☞The *Rural New Yorker*, $3—the *Southern Cultivator*, $2—and the *Maryland Farmer*, $1.50—per annum—furnished for one year for $5. Specimen copies of either sent on application.

☞Back numbers of the "*Farmer*" can only be supplied from April of 1867.

☞The "*Southern Cultivator*," the leading agricultural monthly South, price $2 per annum, and the "*Maryland Farmer*," price $1.50, furnished both at $3 per annum.

☞Correspondents should always give their *Postoffice, County and State* at the top of their letters, and write their names *legibly*.

BOOK NOTICES.

JOSEPH II AND HIS COURT—*An Historical Novel.*—By Miss Muhlbach. New York. Appleton & Co. For sale by Cushings & Bailey, Baltimore.

We have not yet entirely finished this charming volume—one of the greatest treats we have enjoyed for a long time. The well known reputation of the authoress makes it superfluous in us to say anything to recommend a book of hers to the attention of our readers, but in this she transcends all her previous efforts. The attention is riveted by the vivid pictures, the historical accuracy and the charming details of the political and everyday life of the exalted personages who figured so conspicuously during that eventful period of Austrian rule. The book exhibits careful research, and chapter and verse are invariably given from the best authorities to prove every statement that might appear exaggerated or overdrawn. Since the days of Sir Walter Scott, but few writers have appeared capable of wielding the pen in the ranks of historical fiction, but his mantle seems to have fallen on the fortunate shoulders of this accomplished German lady.

We have received from Robert Clarke & Co., publishers, 65 West Fourth street, Cincinnati, Ohio, advance sheets of a work now in press titled "VINEYARD CULTURE IMPROVED AND CHEAPENED," by A. Du Breuil, Professor in Royal School of Arts and Trades, Paris. Translated by E. & C. Parker, of Longworth's Wine House, with notes and adaptations to American culture by John A. Warder, author of "American Pomology"—144 illustrations. From an examination of these advanced sheets, we predict for this work a wide circulation.

VALUABLE STOCK FOR SALE.—We would direct attention to the advertisement of the valuable thorough-bred stock belonging to Messrs. Winans, Wilson and Hughlett, offered for sale by John Merryman & Co. The stock of Mr. Winans was selected without regard to cost, and being offered at extremely moderate prices, an opportunity is given our farmers to improve their herds.

PEAS FOR SEED.—A correspondent of the *Rural American* says:—Peas for seed should always be picked as soon as they attain a full size, before the pod begins to turn. Put them away in the pod to dry. Peas dried in this manner will bring peas the next season from ten days to two weeks earlier than if allowed to ripen on the stalk, and the same rule applies to beans, corn, and almost all garden vegetables, as I have proved by actual experiment.

Col. Oden Bowie, Prince George Co., Md., has purchased from Mr. R. Viley, Lexington, Ky., the following colts: Bay colt by Uncle Vic, dam imp. Silver Star, by Kingston, two years old, and chestnut filly by imp. Australian, dam Undine, by imp. Yorkshire, two years old. The price paid, $500 each.

RECEIVED.

List of Premiums and Regulations for the 18th annual Fair of the Ohio State Board of Agriculture, to be held in the city of Dayton, from 23d to 27th September, 1867. The awards offered are on a most liberal scale. Address Hon. John H. Klippart, Secretary, Columbus, Ohio, for copies.

List of Premiums and Regulations for the 27th annual Fair of the New York State Agricultural Society, to be held at Buffalo, from 1st to 4th October, 1867. For copies of premiums, &c., address Benj. P. Johnson, Esq., Secretary, Albany, New York.

From J. M. Shaffer, Esq., Secretary, Fairfield, Iowa, we have received a number of copies of the Rules, Regulations and List of Premiums of the 14th annual exhibition of the Iowa State Agricultural Society, to be held at Lyons, Iowa, from 1st to 4th October. Copies can be obtained at the office of the "*Maryland Farmer.*"

From R. H. Allen & Co., New York, their elegant descriptive and illustrated Catalogue of Agricultural and Horticultural Implements, machinery and hardware, and of Live Stock, Seeds, Fertilizers, &c. This Catalogue is one of the most complete and extensive that has ever fallen under our notice.

From the "Albany Cotton Gin Manufacturing Comp'y" of Albany, New York, their new and illustrated catalogue of "Star" Cotton Gins and Condensers, Cotton Presses, Cotton Cultivators, Horse Powers, Threshers, &c., &c.—John Ward, President; G. D. Van Vliet, Secretary and Treasurer; A. B. Farr, General Superintendent; Wm. B. Emery, (survivor of Emery Bros.,) Superintendent of Manufactory.

From Wm. Warfield, of Lexington, Kentucky, catalogue of his celebrated herd of Short Horn Bulls, Cows and Heifers.

From J. C. Cox & Co., Osborn, Green Co., Ohio, their Catalogue of Thorough-Bred stock, consisting of Cattle, Sheep, Hogs, Dogs, Goats, domesticated Deer and Elk, Rabbits, Fancy Cats, Water Fowls—Swans, Gease, Ducks; Land Fowls—Turkeys, Guineas, Pea-Fowls, Chickens, of every description and variety. Also Fancy Pigeons, Ring Doves and Birds. Those interested can send as above for Catalogue.

THE ADVERTISERS' HAND BOOK, from T. C. Evans, Advertising Ageney, 129 Washington street, Boston, containing a complete list of the religious, agricultural and literary publications in the United States, and British Provinces, &c., together with valuable suggestions to Advertisers.

From Samuel Edwards, circulars of "The Evergreens" Nursery and Fruit Farm, La Moille, Bureau Co., Illinois.

TO PURIFY A SINK.—In hot weather it is almost impossible to prevent sinks becoming foul, unless some chemical preparation is used. One pound of copperas dissolved in four gallons of water, poured over a sink three or four times, will completely destroy the offensive odor. As a disinfecting agent, to scatter around premises affected with any unpleasant odor, nothing is better than a mixture of four parts dry ground plaster of Paris to one part of fine charcoal by weight. All sorts of glass vessels and other utensils may be effectually purified from offensive smells by rinsing them with charcoal powder, after the grosser impurities have been scoured off with sand and soap.—*Ger. Tel.*

COMMUNICATED.

FOR THE MARYLAND FARMER.

THE CROW---Corvus Americanus.

In the June number of the *Farmer* is published an article entitled "Propagation and Preservation of Birds," signed J. Wilkinson, Landscape Gardener, in which he makes a special plea for the "crow." Being willing to give his crow-ship all the credit his due, I must beg to be allowed to differ somewhat from your correspondent in the agricultural value of the crow, and in order to decide his case I know no better way than to bring Mr. Crow into court as a criminal, with evidence pro and con, also to examine him personally under oath before impartial judges, and if we find more points against him than in his favor we must condemn him and proceed to his execution.

Mr. W. claims the crow prefers insects for food to cereals, allow him the benefit of any doubt, if this were the point on which the case turned, or the only charge to be made, we would discharge him at once, but we find upon farther investigation that there are other points to be proved or disproved.—During a portion of the year when the ground is covered with snow, insects are dormant and small birds are away, the crows that remain subsist upon a very scanty allowance of seeds of plants, acorns, frozen apples, and an occasional stray field mouse, together with now and then a caterpillar, beetle or the cocoon of some Lepidopterous insect, and for a few weeks next following the opening of spring insects and grubs are consumed and the crow may be considered beneficial. He, the crow, also lays claim that he is still further beneficial in eating the flesh of dead animals left to decay; but we claim, at this day, that all such animals should be converted into manure, instead of wasting their fragrance in the air, or furnishing a precarious subsistance for other animals to quarrel over. Our soil needs all such ammoniacal or nitrogenous matter to sustain fertility. Allowing that a part of the year he is beneficial, the balance we must divide his honors, and we think that we shall find his demerits to greatly overbalance his benefits for the whole year. As soon as the small birds, which are our friends altogether, begin to lay their eggs in spring he commences his depredation upon them, and in a single day has been known to destroy eggs, which, if hatched and the birds remained through the season, would, before they left in the fall, have destroyed caterpillars and other noxious insects to the number of over 96,000; and while the young crows, which are very ravenous, remain in the nest, the crow is doubly destructive; nor is this all, he is destructive in garden and field, fruit and grains. Without particularizing which might be done, we find that in counting all his merits, allowing for each one unit, that they sum up for the year 229. In the same manner counting his demerits and they amount, for each merit, 21 demerits; thus instead of farmers being "benefited by them infinitely more than they are injured," the reverse is true; they destroying many of the farmer's best feathered friends as well as injuring his crops.

Observation and investigation will prove to any unprejudiced mind, I think, that if the amount of injury done the agriculturist is not fully equal to the above that yet it is largely in the ascendant over the benefit conferred. Like our friend W., I am the friend of birds, and would see all those which are beneficial to the agriculturist protetcted and propagated; but if in investigating and observing their mode of living, &c., their demerits are found to predominate, I cannot conscientiously defend or plead for them. Would any advocate of the benefits conferred by the crow upon the agriculturist but closely observe, investigate and judge him according to his acts, I think they could hardly fail of condemning him.

GIARDINIERE.

Wild Grapes of Tennessee---Good for Wine---Crops, &c.

A correspondent writing from Goshen, Virginia, and who has just returned from a tour through Tennessee, of which State, up to the war, he was a resident, after speaking of his visit to some newly discovered gold regions, says:

"While in the mountains in Tennessee I discovered *vast* quantities of wild grapes, called "fox grapes." They mature from September to November, and yield about three gallons of juice to the bushel. Wine made from these wild grapes is delicious, and I have made arrangements with a man there to make a large quantity this fall. * * *

If the cost is not too great and the grapes "hit" well this summer will send you a barrel of wine.—These grapes make the best wine I ever tasted; indeed it is too good for everybody to drink. I found *seven* barrels at one little log cabin in the mountains made in a rude press similar to the old fashion tobacco press. *Two* glasses of this wine makes a man feel *good; four* makes him perfectly oblivious of the *stings of fortune*, a thing very much needed in this desolated land—and by the way this leads me to say something of the condition of the country through which I have recently traveled.

Along the public highways the country looks bad enough, but when you get back in the country it is the perfection of desolation. It is a wonder how these people have managed to live at all; when the war ceased they were left without stock of any kind—cows, mules, horses, sheep, negroes, all gone.—The last two years what crops they planted failed, and how they have managed to live is a mystery.—The crops this spring look well; if nothing happens the wheat crop in the next two weeks, a good crop will be harvested.

The negroes generally behave themselves well, so far as my observations extended. The most intelligent among them ignore politics, have nothing to do with the "leagues." The little towns suffer a good deal from these "leagues." The Radicals are "herding" (cooping) the Nigs, preparing for the election soon to come off between Brownlow and Etheridge. The contest is very bitter, but from all the signs and practices of the Brownlow party he must succeed."

FEED FOR SHEEP, &c.—J. N. Insley, in *Prairie Farmer*, says:—The very best feed for sheep, cows or calves is a mixture of oats and Hungarian grass.

Two bushels of oats and one peck of Hungarian seed to the acre, cut and put up like timothy, makes the finest feed in the world; and one acre will furnish more and better feed, than an acre of anything I can get for stock. It must be well cured. Two day's sun will not be too much.

MANUFACTURE OF FISH GUANO.

BALTIMORE, May 18th, 1867.

DR. A. S. PIGGOT:

Dear Sir—Large quantities of Fish Guano being used in Pennsylvania and Maryland, most of which is brought from the Eastern States, would you be good enough to give us such information as you may possess in regard to its fertilizing qualities, mode of manufacture, &c., and whether or not the fish of the Chesapeake and its tributaries would not answer, with proper machinery, for the production of the same. Yours, very truly,

S. S. MILLS & Co.

To the Editors of the Maryland Farmer:

I see no reason why the manufacture of fish guano may not be carried on advantageously in the Chesapeake bay and its tributaries. We all know that a very large number of fish frequent these noble bodies of water, and that a large income is derived by many persons from fisheries. Whether taken for immediate consumption or for packing, there is always a great quantity of offal. A very large proportion of the fish brought to shore is unfit for food and therefore rejected. Now these rejected fish, together with the necessary offal of those that are packed, would afford a considerable quantity of materials for manufacturing. If special attention were paid to the collection of fish for agricultural purposes, there is no doubt the catch could be greatly increased.

It can hardly be necessary at this late day to dilate upon the value of fish as a fertilizer. Professor Way, a great English authority on agricultural chemistry, calls attention to the fact that the analysis of sprats and that of wheat are almost identical. Thus wheat and sprats both contain about 2 per cent. of nitrogen; wheat has 1.75 per cent. of ash, of which about one-half is phosphoric acid and one-half potash. Sprats contain 2 per cent. of ash, of which about two-fifths are phosphoric acid, and one-fifth potash. The dried and expressed fish are of course very much richer than this. Owing to some irregularity in the mode of preparation, or in the quality of the fish itself, this so-called fish guano is not uniform. The ammonia has varied in my determinations from 8 to 12½ per cent. in different samples.—Those of course which have undergone much putrefaction are poorer in ammonia than those which have escaped this source of loss. The phosphates have been variously estimated at from 7 to 14 per cent.

Several processes have been adopted for extracting the oil and getting rid of the superfluous water. That most commonly employed for this purpose consists in heating the fish in a rotary cylinder or in a pan with a steam jacket until they are warmed through, their albumen coagulated and their oil rendered fluid, and then subjecting them to compression by a powerful hydraulic press, which forces out most of the oil and the excess of water. The condensed residue, technically called scrap, is thrown into an apparatus known as a picker, which tears it into shreds. By a modification of this process, other manufacturers treat the fish with sulphuric acid before pressing. Others again use the same acid upon the pressed cake. The effect is to render the fibre more divisible and to increase the facility of reducing it to powder.

A pamphlet published by a Long Island company engaged in the manufacture of fish guano gives the following as the commercial results of the treatment of fish for guano at Lowestoft, England:

40 tons of summer herrings produce 9 tons guano and 1,092 gallons of oil; 40 tons autumn herrings produce 9 tons guano and 924 gallons of oil; 40 tons of dog-fish produce 9 tons guano and 840 gallons of oil; 40 tons of sprats produce 9 tons guano and 840 gallons of oil.

This makes the value of the products—

9 tons guano, at $30* a ton	$270 00
840 gallons of oil, at 67½ cts. a gallon	565 00
	$835 60

The daily expense were—

40 tons of fish, at $5.50 a ton	$220 00
Labor, &c	25 00
1 ton of coal	2 50
180 bags at 20 cts	36 00
Cask for 840 galls, oil at 5 cts. per gal	42 00
Interest, insurance, freight, &c	69 50
	$395 00

Profit $440.60, or considerably over 100 per cent. There are some items in this account which will vary in England and this country, but with all due allowance for them it is evident that the business must prove remunerative. A number of factories of this kind are now in operation. Some of them have been successful, others have failed, a common history of all enterprises of whatever sort.

The manufacture is not difficult nor the machinery expensive, and it would be easy to save to the State a very large quantity of valuable fertilizing material now squandered and irrevocably lost.

Very respectfully, your obedient servant,

A. SNOWDEN PIGGOT, M. D.,
Analytical and Consulting Chemist.

Laboratory 59 S. Gay street, June 14th, 1867.

* The pamphlet rates it at $45, but this is evidently too high.

THE PROSPECT OF THE FRUIT CROP.

A correspondent in Anne Arundel county, Md., writing June 27th, sends us the following discouraging accounts of the fruit prospects in that section:

The long continued rains, accompanied by close, murky weather, have seriously injured the fruit crop. Cherries and latter strawberries and raspberries have been almost entirely destroyed, and peaches greatly injured, rotting on the trees and falling in great quantities to the ground, besides which the curculio is making frightful ravage amongst them. The pear crop is almost a failure, the season having been too wet for that fruit, and it has also been much affected by insects. The same may be said of the apple.

In regard to peaches, I have never before known more fruit set on the tree early in the season. If the weather should continue for two weeks such as it has been for the last month, the crop will be small. Should it be clear and warm a full half crop will be made, but under no circumstance can it exceed it.

Early potatoes and tomatoes have also been much injured, and the crops of both are likely to be small and inferior in size and quality. H.

Horticultural.

THE APPLE TREE BORER.

A Sure Remedy against his Attacks.

* * * I say in the heading of this article, "a sure remedy against his attacks." Yes, and I believe the only certain and reliable remedy. The apple borer is the larvæ or grub of a certain very beautiful bug or beetle, which deposits its eggs at, or near the surface of the ground, on the trunk of the tree, during the months of May and June. I think each bug lays from fifteen to thirty eggs, or else they lay different clusters of them; but it is no matter—they lay enough of them any way. These eggs hatch out, in a week or two, a nice, plump, little borer—yellowish-white, with a yellowish-red head—very small and trifling at first, but he immediately begins to fulfil his destiny by eating his way through the bark of the tree, which it takes him from six weeks to two months to accomplish—not usually going straight through, but reaching the wood about half an inch from the starting point; at this time he is from an eighth to a quarter of an inch in length. He now commences to feed on the liber and adjacent wood, and grows apace until cold weather commences, when he usually eats his way downwards below the surface of the soil, and there hybernates during winter. (At least I think he hybernates.)

The next spring, as soon as hard freezing is over, he goes to work vigorously, still feeding on the liber, or inner bark; by fall he will have attained a length of ½ to ¾ of an inch, when he always—I believe—works his way below the surface of the soil and apparently feeds but little until spring. With the commencement of warm weather he is again vigorously at work, and as he has attained considerable size, it takes considerable to supply his commissary department during the coming summer. During this third and last summer of his life is the time when he does the most damage.

In a tree one or two inches in diameter, one borer will eat all around till it comes within a quarter of an inch of girdling it. In larger trees, there are usually from one to five to a tree if any; one borer in a tree three or four inches in diameter does not generally injure it fatally without he cuts clear around it, which is not often the case; but when there are more they almost always cut within about a quarter of an inch of each other's burrows, which generally proves fatal.

We have now followed a specimen until he has reached the third and last fall of his growth, at which time he is a full inch or more in length and of the thickness of a goose quill; between this time and the first of the following May, our borer cuts a hole directly through the trunk of the tree, a few inches above the surface of the soil, within all but a shaving of the bark on the opposite side; then drawing himself back a little, he goes into the chrysalis state, from which, in the course of a few weeks, he emerges a perfect bug.

Now having followed him through his changeful life, and knowing something of his habits, I will give my plan of exterminating him; I will suppose that I have a young orchard of any number of trees, say a thousand; the second season after planting, about the last of July, or during the first half of August, with a common hoe, I take all the weeds and other trash, and about an inch of soil, from the crown of the trees; then, any time from the first to the middle of September, with a pocket-knife, examine carefully the stem of each tree; the borer can readily be found by the refuse thrown out of the hole made on entering; this refuse of a borer, of the same season's growth, will be about the size of a pea, and, being of a glutinous nature, sticks around the mouth of the hole, and can readily be seen; older ones throw out coarser chips that fall to the ground. When one is found, take the knife and cut him out. If an orchard is carefully examined in this way each year, there need be but few, if any borers missed, and as they are more easily found the second fall of their growth, and can have done but little damage at that time, we would never receive any serious injury from them. Now it is no great task to do this; a man will clear the litter and soil from around a thousand trees, in a day, and can take the borers out in another day. I will agree to do both jobs carefully in one day's time. A great undertaking is it not? * * * *Prairie Farmer.*

Fruits For West Jersey.—The following list of apples, pears, peaches and cherries, are furnished by the fruit committee of the West Jersey Fruit Growers Association:

Apples.—*For Summer:* Sweet Bough, Hagloe, and Early Red Streak; *for Autumn:* Maidens's Blush, Porter, Orange, Pippin, and Fallowater; and *for winter:* Smith's Cider, Baldwin, and Cooper's Redling.

Pears.—*Summer:* Early Catharine, Dearborn's Seedling and Beurre Giffard; *for fall:* the Bartlett, Seckel, St. Michael and Dutchess; and *for winter;* the Lawrence, Beurre D'Anjou and Beurre Clairgeau. The Ananas D'Ete, Bartlett, Duchess, St. Michael and Louise Bonne are favorite dwarfs. The Bartlett is the only variety that gives universal satisfaction.

Peaches.—The best six varieties. Troth's Early, Walter's Early, Large Early York, Harker's Seedling, Stump of the World and Old Mixon Free.

Cherries. The Early Richmond, Carnation, Belle Magnifique and common Pie Cherry.

The Early Richmond is no doubt the most profitable variety. It is a good grower, early and handsome, and a profuse bearer.

Planting Trees after they have Green Leaves.

A correspondent in the *Garmantown Telegraph*, gives the following as his ten years experience:—It is not generally known that by a peculiar course of treatment trees may be as successfully removed for a month after the bursting of their buds as during the month before. This peculiarity of management consists in taking off the expanded leaves, and shortening back a few inches of the shoots. When this practice is followed trees rarely fail, indeed many things move more successfully so treated than at any other season of the year. The roots seem to push forth new fibres immediately, and sustain the heavy demand for moisture which is always the difficulty in a newly-planted tree. When a tree dies under the operation, the "philosophy" of the thing is that evaporation has been greater than the supply of sap could sustain.

It is well in transplanting at any season to remember this bit of "philosophy." Hence do not let the roots dry, even for a moment if it can be helped, because every withered root by so much lessens the plant's capacity to draw moisture from the soil. In like manner get up all the roots you can for the same reason. Some very clever workman will tell you that "there has been enough roots there to satisfy anybody," but after you have all this, get still more if you can. And then in planting ram the earth very firm. Stamping with the heel is not enough. A paving rammer is a good thing. Ram the earth with every shovel full thrown in, and all for the reason that unless the roots are in actual contact with the soil they cannot absorb moisture freely, to supply the waste of evaporation. There is you see but the one object all through, the easiest way of all being that which induces a rapid production of roots, and that is to plant at the growing season, when the roots and branches both are very active, but at the same time guarding against a too rapid exhaustion of moisture by cutting away the green leaves which would otherwise exhaust the stock in a few hours.

The Black Louse and Borer---Pruning---Pear Blight.

Mr. Galusha in the Transactions of the Illinois Horticultural Society for 1866, among other things, says:—"The black louse and borer are the two almost universal present enemies in the apple orchard of the West. The former is easily held in check by scraping off the rough bark in spring, and applying soft soap or strong lye. The latter is as surely cured by scraping as before, in spring, and digging out with a knife. He uses for this purpose a strong pruning knife and mallet, always taking care to cut up and down, taking out wedge-shaped chips. The wounds thus made prove but a slight injury to the tree. He makes another useful suggestion, which is that it is essential to the vigor of orchard trees that no more pruning be done than is necessary to admit of gathering the fruit. Sufficient foliage should always be left to partially or quite shade the trunk and limbs.

A great many young trees are ruined by excessive pruning.

Among the remedies recommended for pear blight we notice the following: Seed the pear orchard to grass. The grass is cut and left upon the ground to rot. In this way it is claimed the mulching answers to cultivation and the trees are not liable to blight."

In regard to wasting money on new and untried things, Mr. Dunlap, in his lecture, before the same Society, has some sensible advice, which is as applicable here as at the west. He says:

"Out of a thousand varieties of the apple, less than fifty will be found eminently profitable; out of the whole list of cherries not three are worthy of place in your grounds; out of nearly two thousand varieties of the pear, twenty will cover the very best for the orchard; out of the vast list of peaches not a dozen have been proved; out of the almost endless list of new grapes, the really profitable, thus far proved, do not number a score; out of the list of plums, I ask you to name three that give you fruit; out of the hundred of new strawberries, what have you for market but the Wilson? out of the endless list of raspberries, that fill your gardens like worthless weeds, what have you beyond the purple cane and black cap, of any commercial value? out of the list of blackberries, are you really satisfied with any in open ground? Have you any better currant than the red Dutch, a more profitable gooseberry than the Houghton, a better rhubarb than Myatt's Victoria and Linæus? Why then run after new things, or take the word of some interested party? The rage for novelties among horticulturists is one of the great drawbacks."

Thinning out Fruit.

It may be considered somewhat early to make suggestions on the subject of thinning out fruit, but it can never be too early to give good advice, and we think that as pear and peach trees are beginning to show their product, the thinning out process may be begun at almost any time.

It is true the operation can be performed conveniently only upon such trees that are not over large. But it should be especially attended to in young trees, which frequently over-bear, to the great injury of the health of the trees, as well as the quality of the fruit. To obtain the finest specimens of pears, they should not be allowed to grow in clusters or in contact with each other, and all that exhibits the

least imperfection should be removed. What is lost in number will be doubly made up in size and flavor. This should be remembered. Many persons regard the thinning out of peaches, pears, and apples as so much loss; but they are not judges of fruit, and have no knowledge of its proper culturs. They want as large a crop as possible, letting the quality take care of itself, no matter how much the tree is damaged and what effect it may have on the following year's crop.

On some of our own pear trees last year we removed three-fourths of the entire crop and afterwards found the tree to contain more than was advisable.

It goes hard with some people to diminish the quantity of fruit upon their trees. Some times they plead want of time; but this is not admissible, for if they have not time to attend to the proper cultivation of the fruit they should abandon it altogether. The real cause is their greediness. You can't make them believe that they are gainers by destroying a portion of the crop, saying that nature is the best judge as to the quantity of fruit. Such persons have no practical knowledge of fruit-raising, and the sooner they give it up the better it will be for them, their pockets and reputation.—*Ed. Germantown Telegraph.*

THE CURRANT WORM.—We see a great deal said again in regard to the ravages of the currant worm and numerous remedies suggested to get rid of it.—This insect, starting from the foot of a branch, where the egg is laid and the young grub finds a lodgement, it passes nearly through its entire length, when it emerges into the light of day and becomes a propagator. Now, what we wish to know from those who cultivate currants and have observed the operations of this insect, is, whether they have ever known the bush or the fruit to be in any degree injured by it? We have cultivated currants for thirty years, and we suppose the worm has been as active here as elsewhere, but have never seen that the least damage was done by it. Our crops have always been abundant, and the stools send forth so large a supply of branches or canes as to oblige us to thin them out. Some of these stools are thirty years old, and there are stems that would girth some six inches.

If the worm did any injury we certainly should have seen it in all this time; and we shall be glad to have the experience of others who doubtless have the complaints of the depredations of this insect and the measures recommended for its destruction.—*Ed. Germantown Telegraph.*

Nurserymen Take Notice.

SOUTH PASS, UNION CO., ILL'S.

It has been noticed, for some time, that a great many Apple trees are dying in this region; and the subject has assumed so much importance that at two recent meetings of our local Horticultural Society, it has been the special subject of discussion. This discussion has proved to the satisfaction of our Society, that these trees have died because they were *manufactured* in opposition to scientific rules, viz: by grafting on root tips.

The testimony shows that stock-grafted trees have invariably done well, and that root-grafted ones have done ill. One man reported that of 800 Apple trees planted 8 years ago, 65 are living; and that of 500, planted at the same time, of same varieties and similarly treated, he has lost but five. The first lot were root-grafted, the other on the stock.

The Society passed the following resolution without dissent: *Resolved*, That we recommend that no root-grafted Apple Trees be hereafter planted.

F. A. E. HOLCOMB *Secretary*,
South Pass Horticultural Society.

[The above corresponds precisely with the views of our correspondent "SANDLARK" in our last number, and it affords us great pleasure to add such strong testimony to his sound views. For many years it has been our individual opinion, that decadence of the apple was in a great measure attributable to the introduction of "root-grafted trees," and we now feel that our views were correct. Let us hope that a new era in apple culture will commence, and that the recommendation of the South Pass Horticulturists that no "root-grafted" trees be planted, will be universally adopted.]—*Ed. Hammonton Culturist.*

NEW DISEASE IN APPLE TREES.—The *Gardener's Monthly* for April, speaks of a new disease in apple trees, in the shape of what it calls a new species of cryptogamic fungi, one not known to exist on apple trees in the United State's before.

To prevent the spread of this disease, the editor says it is only necessary to understand that these parasitic fungi run the same course as other plants, and therefore, if the knot is destroyed before it comes to maturity, it will be prevented from propagating itself. The seat of this fungus is on the ends of the branches.

WE ARE informed by W. A. PARKER, of Bourbon, says the *Farmers' Home Journal*, of Lexington, Ky., that he sheared from a yearling buck, which was by Bedford's Prince of Wales, sixteen and a half pounds of wool. If any of our farmers can beat this, let us hear from them.

LONG WOOL.—Mr. WM. WARFIELD left at our office a sample of wool, shorn from his Cotswold Sheep, the fibres of which measure seventeen inches. We invite any farmer who has wool of greater length to send us a sample.—*Ibid.*

Ladies Department.

Somebody has written the following about the girls:

THE GIRLS.

God bless the girls,
Whose golden curls
Blend with our evening dreams;
They haunt our lives,
Like spirit wives,
Or Naiads haunt the streams.

They soothe our pains,
They fill our brains
With dreams of summer hours;
God bless the girls,
God bless the curls,
God bless our human flowers.

The wives are quite as deserving of blessing as the girls, nd we submit the following:

WIVES—TRUE WIVES.

God bless our wives,
They fill our hives
With little bees and honey;
They ease life's shocks,
They mend our socks,
But don't they spend the money!

When we are sick,
They heal us quick—
That is, if they do love us;
If not, we die,
And yet they cry,
And place tombstones above us.

Of roguish girls,
With sunny curls,
We may in fancy dream;
But wives—true wives—
Throughout our lives
Are everything they seem.

TEN ACRES TOO MUCH.

BY PROF. O. HOWE GREENE.

We have been shown, in an interesting volume, how to make "Ten Acres Enough" for a productive farm. Your humble servant will endeavor to show how he found "Ten Acres Too Much."

I had often meditated upon the growing necessity of removing my children to the country where they could learn to breathe fresh air, and enjoy milk that was "the pure juice of the cow," and one evening after tea I broached the subject to Mrs. Greene in this manner:

"My dear!"

"What, love?"

"Ahem! They are spoiling!"

"What's spoiling, dear? The canned peaches?"

"Our boys. We must move out of town or our boys will be ruined. I have made up my mind to move out a short distance and see if I can find 'Ten Acres Enough' to attend to in connection with my town business."

"I am afraid you will get enough of ten acres before you have been there long. You told me you knew nothing about farming, and I am sure your attempts at gardening are not a very good guarantee of your success. You remember how you set out top onions, wrong end up, don't you?" was Mrs. Greene's rather sarcastic reply.

"That was merely to cause a *revolution* in the growth of onions," I replied facetiously. "But remember the influences children are exposed to here in the city. Why no longer ago than yesterday, our Charlie asked me if I knew the reason why they were about to discharge the organist. I replied I did not. 'Because he can't play *euchre* on the organ!' was the irreverent reply."

"Oh, my!" and Mrs. Greene looked worried.

"And would you believe it," she added, "our little Otis, so sweet, O'tis so horrible! He asked me why the letter S was as dangerous to let loose among a car-load of passengers as a young tiger? Of course I could not tell. 'Because it might make *sassengers* of the *passengers*,' was his horrid reply."

But I will not bore the reader with a long account of our proceedings. Be it known, then, we bought ten acres, with its house, barn, fruit, etc., and commenced operations.

Much has been said of the quandary of a young lady compelled to choose a husband from a score of admirers, but it is nothing in comparison to a green-horn selecting farm or garden implements. Everything now-a-days is "first-class"; at least I never saw anything second-class advertised; even the one store at the cross-roads is a "first-class" store.

Implements procured, the next thing was the stock.

The first purchase was a cow, "part Durham," her owner said. He didn't say which part was Durham, but I am inclined to think it was the stomach; that beat the "natives" all hollow, and seemed to be "all hollow" still.

Job had a great many cattle, but I don't believe he had a "part Durham" cow like mine. Just imagine Mr. Job milking her. He is just ready for "stripping," when down comes a "part Durham" hoof into the midst of a pailful of "part Durham" milk, and Mr. Job lies flat on the ground, with a pair of spoiled pantaloons. (You must imagine Job with pantaloons on!) Now see if he is patient.

"Our Charlie" is a poet. (He resembles his pa very much in this respect.) Here is the first stanza of some lines he composed on "Our Cow," and set to the tune of "Johnny Comes Marching Home." The substitution of cents for dollars in the price of the cow is, of course, an allowable poetical license:

"I bought a cow for fifty cents,
Co-boss! Co-boss!
I bought a cow for fifty cents,
Co-boss! Co-boss!
I bought a cow for fifty cents,
And she skedaddled over the fence,
And I have never seen her since;
O, we'll all feel gay, boys,
When that old cow comes home."

This is *true* poetry—literally true.

Our second cow, however, was a success, and "Cherry," the muley, was soon a family pet.

My next purchase was of chickens. I had seen such contradictory statements regarding different breeds that I determined to try two of each of all the prominent breeds, and form my conclusions from experience. I did so, and purchased Black Spanish, Poland, English pheasant, French, and so on, from Bantam to Shanghai, *via* East Indies, and return. The result was I soon had an exhibition of European politics, on a reduced scale, in my own barn-yard; and, as is always the case, poor Poland got the worst of it. This "balance of power" performance was quite interesting to me, as I was involved financially; so I rushed into the house to procure some means of restoring "peace in the family," and when I came out, after a short delay, there was entire "change of base." An Irish neighbor of mine kept a game rooster, armed with "gaffs," for fighting purposes, and behold he had made a "Fenian raid" upon my premises during my brief absence, had "cleaned out" Poland, English and French, and was now employed with my only Black Spanish rooster. I "welcomed the invader with bloody hands to a hospitable grave," with a stick of wood, and missed him. He darted "over the border." I had no unkle-psalm to intercept him, and the "invader of domestic peace" escaped. My best fowls were ready to "go to pot." However, I sought consolation in Shanghai, relied on Brahma Pootra, buried my grief in Bantam, and determined not to be chicken-hearted.

But I was not yet through with troubles. A few nights after, I was aroused from profound slumber by an agitation of my corporosity, and the voice of Mrs. Greene exclaiming: "Mr Greene, say! Mr. Greene! Otis, my dear, wake up! There is a sk—sk—squawking in the hen-roost."

I arose hastily and sallied forth. On reaching the hen-roost I found my distinguished Asiatic bipeds falling before the deadly ravages of that great "*scenter*" of all creation, the American skunk.

"Theo," whom the boys call my "rattan terror," made short work of the material skunk, but a certain ethereal portion remained with the dog for a long time. I gathered together the remnants of my flock, and began again, with the additional conviction derived from experience that you cannot keep fowls profitably unless you have a vermin-proof hen-roost.

My next purchase was two pigs—they were nice Chester Whites. Major Coats, my neighbor, came over to see them. The Major was originally a tailor. His family are distinguished for military prowess. The Major was all through the Buckeye and Wolverine war—in every battle. At the breaking out of the rebellion his two sons were about the first to go—they went to Canada, I believe.

The Major looked at my pigs a long time, revolving something in his mind, and a quid of tobacco in his mouth, and then asked:

"What breed be they?"

"Chester Whites."

"Chester White's; where does he live?" inquired the Major, dropping his under jaw, and rolling his quid "like a sweet morsel under his tongue," for an instant.

"In Pennsylvania—that is, there is where the breed originated," I replied, with a slight cough.

After some sage advice the Major left me, with an invitation "come up."

A few days after, I "went up" to the Major's. He took me to see his sheep. He said he wasn't going to waste money on these "highfalutin," rams. He raised his own rams, and grade sheep were good enough for him. "But," said I, "Major, that's retrograding, a kind of *grading* sheep that don't pay." The Major told me I was young yet, and had a good many humbugs to learn. I read too many of these "hanged agricultural papers'" He invited me into the house, and his daughters requested me to sing. I complied, and, among other things, I gave them a "medley" song, arranged by myself, a copy of which I append for the "amusement, instruction, and moral elevation" of your readers:

I have come from the mountains
Of the old Granite State,
Where the hills are so lofty,
Magnificent and great,
I have left—
Home, home, sweet, sweet home;
There is no place like home;
There's no place like—
Hail, Columbia, happy land;
Hail, ye heroes, heaven-born band,
Who fought and bled—
In days of auld Lang Syne, my boys,
In days of auld Lang Syne.
Wreaths, glorious wreaths for—
The star-spangled banner, O long may it wave,
O'er the land of the free and the home of—
Yankee doodle, who came to town,
Upon a little pony,
He stuck a feather in his cap
And called it—
The last rose of Summer left blooming alone,
All its lovely companions are—
Away down South in Dixie,
Away! Away!
In Dixie's land I took my stand—
Ere the twilight bat was flitting,
'Neath the sunset, at her knitting,
Sang a lovely maiden, sitting—
O, I should like to marry,
If I could only find
Some very handsome fellow
Just suited to my—
Thump, thump, scold, scold,
Thump, scold away.
Its gone, the comfort of the house—
Down where the patriot army,
By Potomac's side,
Guards the glorious cause of—
My country, 'tis of thee;
Sweet land of liberty;
Of thee I sing.
Land where my fathers died;
Land of the pilgrim's pride.
From every mountain's side,
Let freedom ring.

When I closed, the Major said: "That's a pooty song; a little mixed up like; but the tune don't amount to shucks."

I thanked him (?) for his criticism, and soon after returned home.

When I reached home, I found "a tree peddler" awaiting me. The men in "buckram" business had considered me too insignificant, but this propagator of the "apples of discord" thought me an easy victim. I told him I had "read about him" in THE WESTERN RURAL, the best Ag——

"THE WESTERN RURAL be d—d," and away he went, leaving a "mill privilege" behind for the whole agricultural press.

But enough of details in learning a new business. Suffice it to say that before a year passed I found "Ten Acres Too Much" for me to attend to properly in connection with other business; so I sold three acres and applied the proceeds upon the remainder.

And glad am I that I discovered that ten acres was not only *enough*, but, in my case, entirely *too much*.—*Western Rural.*

DOMESTIC RECIPES.

TREATING A BURN.—It is said that by laying a piece of charcoal upon a burn the pain subsides immediately. By leaving the charcoal upon the wound one hour, it will be healed, as has been demonstrated on several occasions. The remedy is cheap and simple, and certainly deserves a trial.

TO MAKE A SUPERIOR YEAST.—Take one dozen medium-sized Irish potatoes, boil and mash fine; add one cup of white sugar, and one quart of hot water; let this stand five to ten minutes; then add one quart of cold water and one half pint yeast, and bottle off. Use a half pint of this liquid yeast for for a large loaf of bread.

SORE THROAT GARGLE.—Dissolve a small piece of alum in sage tea; then mix a little honey. Or two drachms of oak bark in six ounces of boiling water—use the liquid after it becomes cold; it is also very good.

GOOD PIE CRUST.—For six pies, three cups thick sour cream; two-thirds cup of sweet milk; two teaspoons saleratus, dissolved in the milk. Salt to taste, and mix very stiff; bake slow.

CHEAP SMALL BEER.—To twelve quarts of cold water, add a pint and a half of strong hop tea, and a pint and a half of molasses. Mix it well together, and bottle it immediately.—It will be fit for use the next day, if the weather is warm.

SPRUCE BEER.—Allow an ounce of hops and a spoonful of ginger to a gallon of water. When well boiled, strain it, and put in a pint of molasses, and half an ounce or less of the essence of spruce; when cool, add a teacup of yeast, and put into a clean, tight cask, and then let it ferment for a day or two, then bottle it for use. You can boil the sprigs of spruce fir in place of the essence.

A NICE DISH FOR TEA.—Pour boiling water on crackers; cover them, in a short time they will swell and become soft. Boil some milk; add one egg, a little butter and salt; take the crackers out of the water and pour the milk over them.

PRESERVING FRUIT.

Quality of Fruit.—It is important that the fruit be well grown and well ripened, as it then contains more and richer juice for preservation. Small, half green, imperfect, or half decayed specimens, should be rejected.

Jars or Cans.—Glass jars are now generally employed—earthen succeeds equally well, and is somewhat cheaper, but the fruit cannot be seen. A large number of patent covers have been invented, possessing various degrees of merit. They may be divided into three classes—those consisting of cork; those made of metal or glass, with cement lining; and those with India rubber lining. The objection to cork is porosity, requiring a large amount of cement, through which the air pressing is apt to impart its flavor to the fruit. The India-rubber linings are the most convenient and easily applied, but they should be well made, and form a perfect fit; many that have been offered in market, not being tight, have caused the spoiling of the fruit. Different modes are employed to remove the covers in taking out the fruit. The corks should have two small and strong cords placed under them, for lifting them out, the ends of which should be covered with cement, to prevent the admission of air, or a round piece of cotton cloth may be used for the same purpose. Pincers may be used for drawing the cord or cloth in taking the covers off. The covers may be loosened with the India rubber lining, by inserting the point of a knife.

Heating the Fruit.—The fruit should be heated to nearly about the boiling point of water, but should not be made to stew or boil, as this would break the form of each specimen, and reduce the whole to a mass. For common family purposes, the best way is to place the fruit in a tin pan, with about as much sugar as will give it a proper flavor, and then set the pan in the top of a stove boiler, where it will fit as a lid; then let the water boil beneath the fruit until the whole is well heated through. Small fruit require less time than large ones.

About fifteen minutes will be needed for strawberries and raspberries; twenty minutes for cherries, currants, peaches and plums, and half an hour for apples, pears and quinces.

Filling Jars.—While the heating of the fruit is going on, place three or more empty jars in another boiler, and pour in cold or moderately warm water till it rises nearly to their necks. A heavy weight, as bricks, flat irons, or flat stones, must be placed on these jars to hold them down; and it is safest to place a few small strips of wood on the bottom of the boiler, before setting the jars in, to prevent the cracking by the heat below. When the water about the jars has nearly reached boiling, they then may be filled with the fruit by means of a dipper. This work is faciliated by providing a wide tin funnel made on purpose to fit the mouth of the jar, and it should have a handle a foot long, to prevent any danger of burning or scalding the hand. When the jars are full, the contents should be slightly shaken, to start up any bubbles that may remain, and the water allowed to boil slightly about them for a few minutes. The covers should be then applied, and made air-tight, at the moment the jars are withdrawn from the water. Before applying, the cover, the jars should be so completely filled with fruit, that not the least air or space may remain, but the whole be perfectly solid.

To save the hands from scalding, there should be a pair of forceps made to fit the neck of each jar, to to grasp it readily in lifting it from the hot water.

The juice of all small fruits furnishes sufficient syrup with the sugar to fill all the interstices; but some larger and dryer sorts require sometimes the addition of a portion of syrup made by boiling a pound or two of sugar in a quart of water.

Some persons, after having heated the jars, fill them while they are standing on the table, and then replace them, and continue the boiling for a few minutes, or until every air bubble has passed away, before sealing them tight. Either way will answer, if the work is well done.

Cement.—The best is made of one part of tallow mixed with about ten or twelve parts of rosin. An increase of the tallow softens the cement. The most perfect India rubber linings obviously need no cement; with corks it must be used freely and is indispensible. The best mode is the following, described in the *American Agriculturist:*

Small tin saucers, or "patty pans," are procured, an inch more in diameter than the mouth of the jar—these may be obtained cheaply, by the quantity, of any tinman.

When the jar is filled with fruit, the cork is crowded snugly in, and a coating of cement is placed on the top. A portion of the melted cement is then poured into one of the tin saucers, and the mouth of the jar inverted, placed in it—forming, as soon as cool, a perfect air-tight cover, the saucer remaining until the fruit is taken out of the jars. Common tea saucers, and even blacking boxes may be used, instead of tin saucers.

Quantity of Sugar required.—Some have stated that they succeeded in keeping the fruit without using any sugar; but in ordinary practice it is safest to apply it, and it is best to do so at once, rather than defer it till the fruit is used. Strawberries, peaches, pine-apples, and quinces, require but a small quantity, five ounces to a quart of fruit being sufficient. Cherries, plums, raspberries, and blackberries require more, or from seven to eight ounces.

Stone Jars.—In the absence of common jars, which could not be procured, a friend employed two gallon stone jars, with entire success. They were filled as already described, the fruit running out all around as the lid was applied, so as to prevent any vacancy or air, and the whole well cemented. After several months they were opened in perfect condition.

Tomatoes.—These are the easiest preserved of all ripe fruits. They may be kept entire by merely removing the skin; or, what perhaps is better, as well as more economical, stewed down to about half their original bulk, as they are a very watery fruit.

Strawberries need but few minutes cooking; cherries a greater length of time; peaches still longer, and should be well done.

In order to determine whether the fruit has been well put up, when India-rubber lining is used, lift them by the covers, or apply a few pounds' force to them. If the cover comes off, the work has not been well done—some air has been allowed to remain, or the heating has been insufficient, in which case the boiling must be done over again. It is safest to examine them a second time, in about a week.

It is important that the jars, after the whole process is completed, be placed in a cool and rather dry place. If the temperature is warm, they may spoil by fermentation; and experience has fully proved that they mould in a damp cellar. If the temperature were but a few degrees above freezing, they would probably keep uninjured for years. There is

no doubt that the apartment should sometimes have the credit which is ascribed to a particular mode of of putting up.

Glass jars should be kept in a dark place, to exclude light.

Drying Fruit.

Drying fruits has several advantages over canning or bottling. It is cheaper; it may be adopted on an extensive scale; the fruit may be kept with less care and being several times lighter than when fresh, may be sent long distances, or to foreign countries, at a moderate cost. When fruit-growers shall learn that dried fruit from the highest flavored sorts is as much better than that from the poor unsaleable varieties so often used for this purpose, as the best fresh fruit of the one sort exceeds the other, purchasers will also be willing to pay a much higher price for the best article. When, superadded to this, the fruit is dried rapidly so as to retain a clear, light color, and a perfect flavor, instead of the dark, half fermented fruit resulting from slow drying in bad weather, there will be no difficulty in finding a ready sale for all that may be offered in market. When abundant seasons occur, the surplus should be saved by drying, and may be kept another year.

In some parts of the Western States, houses are erected for drying fruit, and are warmed by fire heat, by means of a furnace with a flue extending around the building, similar to that formerly used for green-houses. This flue is covered with sheet iron. An ample ventilator is placed at the top for the free escape of the large volumes of watery vapor which rises from the drying fruit. Trays or hurdles, about two feet wide, six feet long, and three inches deep, with small strips or laths forming the bottom, are placed in three tiers, one above the other, with a foot or more of space between them. Long strips of scantling, laid horizontally, extending the whole length of the house, and six or eight feet outside, form a sort of railway track on which a frame with rollers runs in and out through a wide door, for running in the fresh fruit and bringing out the dried. A house ten by fourteen feet, and eight feet high, has been found sufficient for about two barrels of fruit at a time, and about twenty-four hours complete the drying process.

There is a small portable fruit drying-house, capable of being carried to the orchard, and used on the ground. It consists of a small building from two and a half to four feet square, or any other convenient dimensions, the lower part covered with sheet iron to prevent danger from fire, and containing a small stove, extending through the house, from the rear of which passes the stove-pipe on the outside, the upper portion of which is seen in the figure.—The fuel would be more completely economised by bringing the pipe back again, and passing it up on the same side as the door of the stove, reversing the place of the doors for introducing the shelves.—*From American Fruit Culturist, by J. J. Thomas.*

SUPERINTENDENT OF LABOR AND AGRICULTURE.

The following was submitted to the Maryland Coustitutional Convention, now assembled in Annapolis, on June 17th by the Chairman of the Committee on Department of Labor and Agriculture, Maj. L. Giddiugs, of Anne Arnndel, and read a first time. Mr. Giddings on presenting the proposed Article, urged its adoption in his usual forcible and clear manner. We may find space in our next issue to submit extracts from the same:

Sec. —. There shall be a Surperintendent of Labor and Agriculture elected by the qualified voters of this State at the first general election for Delegates to the General Assembly, after the adoption of this Constitution, who shall hold his office for the term of — years, and until the election and qualification of his successor.

Sec. —. His qualifications shall be the same as those prescribed for the Comptroller; he shall qualify and enter upon the duties of his office on the second Monday of January next succeeding the time of his election, and a vacancy in the office shall be filled by the Governor for the residue of the term.

Sec. —. He shall keep his office at the seat of government and receive a salary of —— dollars per annum, and may employ a clerk who shall receive a salary of —— dollars per annum, payable quarterly.

Sec. —. He shall perform such of the duties now devolved by law upon the Commissioner of Immigration, and the Immigration Agent, as will promote the object for which those officers were appointed; and after his election and qualification, the offices before mentioned shall cease to exist; and the Superintendent of Labor and Agriculture shall devise and execute such further plans for effectually securing the immigration to Maryland of industrious and useful settlers as may seem expedient, or be prescribed by the General Assembly.

Sec. —. He shall supervise all the State Inspectors of agricultural products and fertiliziers, and from time to time, shall carefully examine and audit their accounts and prescribe regulations not inconsistent with law, tending to secure economy and efficiency in the business of their offices; he shall have the supervision of the Tobacco Warehouses and all other buildings used for inspection and storage purposes by the State, and may, at the discretion of the Legislature, have the supervision of all public buildings now belonging to, or which may hereafter be erected by the State; he shall frequently inspect such buildings as are committed to his charge and examine all accounts for labor and materials required for their construction and repairs.

Sec. —. He shall extend to, and invite from the National Department of Agriculture such co-operation as may best promote the welfare of the people of the State, and he shall perform all such other duties as may be assigned to him by the General Assembly for the benefit of the industrial interests of Maryland, and for the discharge of such duties not hereinbefore specified, he may receive such compensation as may be allowed by law.

Sec. —. He shall make detailed reports to every General Assembly within the first week of its session, in reference to each of the subjects committed to his charge, and he shall also report to the Governor in the recess of the Legislature all abuses or irregularities which he may find to exist.

Sec. —. The office hereby established, shall continue for eight years from the date of the qualification of the first incumbent thereof, after which it may be continued or abolished by the General Assembly.

Good Effects of Lime.

If any one has any doubts as to the good effect of lime on any soil, let him try for experiment half an acre, lime it well, and we think that in four or five years he will extend the application ; once well done and it will last an age. Who ever saw the spot where the ruins of a house once was but has seen the rich, strong grass at all seasons, wet and dry? Now what produces this? The fertility that gathers around the residence of them. It must be the lime that falls into the soil from the bricks and plastering. Lime acts more positively on some soils than on others, but did you ever know of limestone land that was not fertile? that did not give a larger yield of grass? It seems to act as manure or food for plants—for all who are conversant with chemical analysis know that there is a small portion of lime or alkaline matter found in all plants, grasses and trees. Lime supplies this—hence the vigorous growth wherever found—it is much more advantageous to double the produce of one acre than to work two acres for the same returns. Let us try the article; if we see no marked effects the first year and but little the second, doubt not; for it requires time to get this material under way. But when it does act its operations are steady and durable, and annually returns the cost of the application. Do not fear a little cost, for it is an old and trite saying, "nothing risk, nothing have." Most farms are lacking in lime, and till that is given crops must be small.—*Germantown Telegraph.*

How to Use Meerschaums.

The following are directions for the proper use of meerschaum pipes: "Most people spoil their pipes by misuse when new or first smoked. The extent to which this is done has led us to prepare a few brief and simple directions how to use meerschaums and how to color them. A pipe when first smoked should have the tobacco put in loosely and be only half filled; in this way the top will become white and not have the reddish tint it sometimes assumes, and also the wax will remain longer on the bowl, thus settling gradually down to where the button begins to form the 'beard,' as smokers term it.—Never cover the pipe with leather, because the wax melting goes into it instead of remaining on the meerschaum, and thus produces blotches. Always smoke slowly, and do not think the hotter the pipe gets the better it will color, for meerschaum clay without being boiled never colors, and if made too hot the wax melts off and leaves the clay hard and unporous. Make this a rule; keep the pipe cool wherever you wish to color it; this is sufficient to guide you in the proper use of the pipe."—*Cor. Tobacco Leaf.*

Officers of Kentucky State Agricultural Society.

President—Hon. Robert Mallory, of Oldham.

First District.—Vice President—Philip Swigert, of Franklin.

Directors—L. J. Bradford, of Bracken; Zeb. Ward, of Woodford; Wm. Warfield, of Fayette; R. W. Scott, of Franklin; James Hall, of Bourbon.

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Treasurer—James M. Tate.

Corresponding and Recording Secretary—James J. Miller.

Executive Committee—Wm. Warfield, Philip Swigert, Lawrence Young, James Hall, S. T. Drane.

ANOTHER "ISM" FROM MASSACHUSETTS.—*Justice to Dog and Sheep.* The Legislature of Massachusetts, now in session, have enacted that "every owner or keeper of a dog shall annually on or before the 30th day of April, cause the dog to be registered, numbered, described and licensed, and any person keeping a dog contrary to the provisions of this law shall forfeit fifteen dollars, five dollars of which goes to the complainant."

Let the example of the old Bay State, in this thing at least, be followed by every State in the Union, and the Un-Reconstructed DIVISIONS also.

If such laws are enacted throughout the country, the millions now lost by Sheep killing Dogs would be saved to our people. Hurrah for Massachusetts! and death to the Dogs!

THE CUZCO POTATO.—A Ohio correspondent in *Prairie Farmer*, gives his experience with the Cuzco potato. He says:—I have been experimenting with, or raising the Cuzco potato for two years, and I find it is the most profitable potato I can raise, averaging one hundred bushels more to the acre than any other variety, even the peach blow, and it is a better keeper, and a better table potato than the peach blow. It is almost entirely free from disease, when planted on dry ground, and by cutting to single eyes, one bushel of seed will produce from forty to sixty bushels of good sized potatos. They will bring as much in market as the peach blow, where they are known.

Wheeler & Wilson Sewing Machine at the French Exposition.

By Telegraphic dispatch, received June 28th, 1867, per Atlantic Cable, it is announced that Wheeler & Wilson Sewing Machine, was awarded the First Premium Gold Medal for excellence over all others exhibited, this too against eighty-two competitors. Another triumph for American Genius.

Baby on the Porch.

Out on the porch, by the open door,
Sweet with roses and cool with shade,
Baby is creeping over the floor—
Dear little winsome blue-eyed maid.

All about her the shadows dance,
All above her the roses swing,
Sunbeams in the lattice glance,
Robins up in the branches sing.

Up at the blossoms her fingers reach,
Lisping her pleading in broken words,
Cooing away in her tender speech
Songs like the twitter of nestling birds.

Creeping, creeping over the floor,
Soon my birdie will find her wings,
Fluttering out at the open door
Into the wonderful world of things.

The Kiss.

Give me one kiss. I will not ask for more.
But let me take thy face between my hands
And lose myself in those mourned-after lands,
Where I have often lost myself before.
Yea, fix thine eyes upon me whilst I pour
My soul into them. As the sea her strands,
So my tost spirit overflows its bands,
And I would fill thee till thou brimmest o'er.
Give me one kiss. Or ever I go hence
Give me one kiss. And when my starved lips touch
The crimson passion of those lips divine,
Reply thou then, search every smouldering sense.
Grant me this little, love—or else this much,
And let me feed my famished soul off thine!

—A. E. LANCASTER, *in Forney's Weekly Press.*

Wonder if "Lancaster" won't take more than *one* kiss? May as well take a whole package.

GO ASK MY MOTHER.

You've told me many a time and oft
That I was fair and comely;
My eyes were bright—my tresses soft—
While other girls were homely.
"She's quite young to know her will,"
The folks say to each other;
But if you truly love me still—
Why, go ask my mother.

I'm told there's care in married life—
That all the joy's in courting;
When young men have secured a wife,
They say their vows are sporting.
I won't believe what old maids say,
If you won't choose another;
You've bothered me so much to-day—
Do, go and ask my mother.

NEW ADVERTISEMENTS.

STATE FAIRS FOR 1867.

The following State Fairs will be held at the place and time designated:

OHIO	Dayton	Sept. 23d to 27th.
NEW YORK	Buffalo	October 1st to 4th.
WISCONSIN	Madison	Sept. 23d to 27th.
PENNSYLVANIA	Norristown	September.
NEW ENGLAND FAIR	Providence	Early in September.
MICHIGAN	Detroit	Sept. 10th to 13th.
IOWA	Lyons	Oct. 1st to 4th.
MINNESOTA	Rochester	Oct. 1st to 4th.
CALIFORNIA	————	Sept. 9th to 14th.
AMERICAN POMOLOGICAL SOC'Y.	St. Louis	Sep. 11-14
CALIFORNIA		Sept. 9th to 14th.
CANADA	Kingston	Sept. 23d.
ILLINOIS	Quincy	Sept. 23d to 30th.
INDIANA	Terra Haute	Sep. 30th to Oct. 5th
VERMONT	Brattleboro	Sept. 10th to 13th.
KANSAS	Lawrence	Sept. 24th.

CURE FOR CAKED BAG IN COWS.—The *New York Tribune* gives the following remedy, on the authority of T. D. Balderson, Burks county, Penn.—Take lime water, about the consistence of thick whitewash, put it an earthern plate, and about the same quantity of flaxseed oil, beat them well together with a case knife till they are thoroughly mixed, annoint the bag two or three times a day, rubbing it well in. I have used it for many years. Last summer, a neighbor had a young sow with pigs; her bag was so hard he thought she would die. I prepared him some of the mixture, and in a few days she suckled and raised her pigs, they having fed them with a spoon while the mother was sick.

BUTTER MAKING—*Scalding Cream.*—Mary A. Crosby writes the *Ohio Farmer:*

"I read in the *Farmer* an article on butter making, in which the writer advises not to scald the milk. I agree with the writer in every particular except this. I have practised scalding for the past winter and spring and I never had the butter yellower or sweeter since I have made butter, which is over thirty years. I am a farmer's wife, and speak from experience."